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PART I

WHAT CAN A MAN AFFORD?

First Prize Essay

By

PAUL AND DOROTHY DOUGLAS

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CHAPTER I

STATEMENT OF THE PROBLEM

In these days of multitudinous "drives" for philanthropic purposes every thoughtful man has had to ask himself "How much can I afford to give?" and in some rough-and-ready fashion he has had to answer the question for himself. But in its wider bearings his problem becomes so enormously complex that our only hope of an ultimate solution for it is to generalize his situation and see what might reasonably be expected of the givers of our country as a whole. To do this we must begin by facing the difficulties, psychological and conventional, that stand in the way of the "average" man's giving at all.

First as to psychological presuppositions:—(a) It is not to be assumed that the ordinary giver will feel the needs of others within reach of his aid quite so strongly as he does his own or those of his immediate family circle. (b) It is, however, to be assumed that he feels their needs genuinely and seriously, that he would help them if he could, and that it is a general sense of uncertainty, remoteness and inadequacy, that keeps him from giving up to the limit of his powers, rather than any ingrained hardness of heart. It is assumed, in other words, that an attitude toward his possessions and toward his fellow-men, best expressed by the Christian terms "stewardship" and "brotherhood," is not beyond him: so that he would be mortified to devote himself to the satisfaction of his own superfluous wants ahead of the crying necessities of others, *provided* he were clear in his own mind that the relation between the two was simple and direct, uncomplicated by further considerations of public policy and the duty of other givers. As a matter of fact, however, a whole series of such conventional considerations do habitually hamper the "average" giver.

1. The first difficulty presenting itself is the widespread belief that luxurious expenditure is intrinsically a good and necessary thing, and that therefore, for the sake of public policy, giving must not be allowed to interfere with it.

a) The simplest and most naïve form of this belief is known to economists as the "make-work" argument. The idea is that the production of luxuries gives employment to labor *greater than could be secured in any other way*. The qualifying phrase in this statement is enough to reveal its absurdity, but of course most exponents of the doctrine do not go so far as to qualify or compare: they are thinking of *this* method of employing labor alone, forgetting that investments and even

gifts involve the utilization of machinery and labor, and usually to far more useful purposes—since the goods which they produce do not pass away in the using, but will serve still further to stimulate labor and machinery, human efficiency and mechanical efficiency. Doubtless the make-work argument will, however, continue to wield its influence for many years to come, since, as Bastiat points out, the labor employed on objects for personal consumption is clearly seen by all, while labor employed as a result of investment (or charity) is not seen.

b) Another, more subtle, form of luxury belief is expressed in the formula "The best is none too good," meaning that an object of beauty or significance is its own sufficient justification—that its creation is preferable to the multiplication of the "common," ordinary, inartistic goods and services of mankind. An orchid, that is, would be preferable to a scraggy row of school gardens. Here again the argument spells its own downfall when once it is stated with sufficient baldness. Few of us would maintain that the orchid was really and permanently preferable *provided the school gardens could not be kept up too*. But of course the underlying assumption of this as of the previous luxury argument, is that in some mysterious way there still is and will be enough to go round. The real answer to such assumptions must continue to be "the niggardliness of Nature" as the English classical economists loved to call it, or rather, our as yet imperfect control of nature and society.

William Smart states the case succinctly when he says¹ "The total amount of income we as a community yet have is so small that any undue consumption by individuals must put a painful limit not only to the luxuries but even to the necessities of the many. The question of the right to consume, in fact, would not emerge but for one thing: the world is yet poor. . . . If we abstain from luxuries it should not be on any false ground that luxuries in themselves are culpable, but on the real economic ground that there are not luxuries enough to go round."²

It is with this principle in mind that E. J. Urwick³ of the University of London takes as his definition of luxury the excessive using up of goods and services, and for a measuring-rod of such excess bids his readers use the average family income of the United Kingdom, scrutinizing carefully all personal expenditures that prove to be hugely in excess of it.

c) More reasonable than either of the preceding arguments in favor

¹ William Smart, *Studies in Economics*, pp. 300-301.

² Contrast with this temperate statement the confused invective of Emile de Laveleye's *Luxury*.

³ E. J. Urwick, *Luxury and Waste of Life*, Fisher Unwin, London, 1909.

of luxury, is the whole group of what might be called the "industrial progress" arguments. They are somewhat involved, but may perhaps be untangled into at least three strands, as follows: (1) The argument that the experimentation with luxuries by the few serves to introduce new goods which ultimately become part of the standard of living of the mass; (2) that the hope of obtaining luxuries increases the incentive to effort for the mass of workers; and (3) that the stimulus of luxury leads to improvements in production itself.

Let us consider these points in turn. In the first place, it is probable that early experimentation by the relatively wealthy with such luxuries as bath tubs and electric lights did lead to their being approved and ultimately adopted by society in general. In so far forth luxury did at one time perform a useful service. Merely initiating even a desirable novelty in consumption, however, does not thereby enable the mass to secure it. The new good can only be generally obtained if a sufficient supply of labor is diverted to produce it on a large scale. Yet the impetus toward luxury is cumulative, and luxury uses up, upon a few, labor that could be utilized by the many, and thus throws a barrier in the way of the many securing the very innovation it has produced. Hence it is probable that what is needed today is not so much the invention of new forms of consumption as the democratization of those forms now accessible to only the few.

What then of the argument that the hope of securing future luxury makes men work harder? Here again there is some truth, but it is greatly exaggerated. Undoubtedly the man in the street (and for that matter the man in the counting-house) would slacken his efforts if he saw before him a lifetime of absolute equality, of inevitable, complete and nation-wide sameness of expenditure. But of course no such rigorous regimentation is intended by any sensible opponent of luxury. The question is rather, What economic purpose is served by the great, glaringly conspicuous disparities of our modern life? Do they not serve to discourage and embitter our lower economic groups rather than to incite them to harder work? As Urwick points out, the comforts of the class just above his are a far better stimulus to the artisan than are the luxuries of those far beyond him: the desire for the marble palace is not so strong as the hope of a bungalow and strip of ground. At the other end of the scale, where we have the very wealthy, it is hardly necessary to point out that the incentive to extraordinary effort is more apt to be the desire to make one's mark, to create new values, to wield great power and influence, than the desire to excel in consumption pure and simple.

Finally we may briefly dismiss the contention that lavish spending causes improvements in the general technique of production. This is

true only in the most limited degree. The evidence indeed is all the other way. Perfections in industrial method are ordinarily brought about by the demands of mass production, not by the vagaries of the individual consumer. The business that is to be highly organized must first be large-scale; the labor that is to be replaced by automatic machinery must first be doing standardized tasks. Such business and such kinds of labor are found in the great basic industries of our country. But the pressure of luxurious demand is headed steadily in the opposite direction—toward the “choice,” the rare, the continuously varying, the hand-made. This is undoubtedly one of the reasons why France, the great producer of luxuries, is so retarded industrially as compared with England and the United States.

There is then no sound argument for the perpetuation of extremes of luxury in our American standards of life. Indeed to the main objection cited above, that luxurious expenditures, however harmless, directly involve a wasteful using up of our all-too-scanty stock of goods and services, may be added the further objection that it indirectly spreads an unhealthy spirit of emulation and ostentation throughout society—a spirit that breeds ever-increasing degrees of waste. The individual choice of the person of taste becomes the standard of respectability blindly followed by the many. As such it rapidly loses all its original significance and comes to be valued merely for the amount of expenditure it represents—so that we soon have the competition of ostentations so ably set forth in Veblen’s phrases, “conspicuous waste” and “conspicuous leisure.” Meanwhile the original setters of fashion, recoiling from the rush of their imitators, instinctively seek for new and yet more inaccessible (or, as Veblen would say, uncontaminated) fields of choice. This promptly compels a further change of consumption by the lower classes in order that they may keep pace, and the vicious circle begins anew. All classes are thus led to neglect the more sensible goods of life and to concentrate their energies upon the satisfaction of mere vanities.

2. The second great obstacle in the way of open-hearted giving is the vague fear that, though the needs under consideration are real, charity is not the best way to meet them. This fear also takes many forms. Thus the staunch individualist may not believe in gifts for the purpose of public education, on the ground that what the country needs is the development of greater parental responsibility; the ardent socialist may agree with his objection, but on the ground that this function should be taken over by the state and paid out of taxes; while the hard-headed business man may believe that the country’s first need to-day is for a greater supply of capital goods—that until that is assured by an increasing body of solid investments, the rising generation must wait.

Taking these arguments in reverse order and applying them as we must to the cause of benevolence in general, not to any single set of charitable objects, we may meet them as follows:

a) The investment argument—or the theory that the surplus over personal expenditures should be used to produce further capital goods, rather than to alleviate need directly.

It is true that invested capital is not hoarded but is used to increase the effectiveness of industry. If spent for productive and not merely for moneymaking purposes, it will enable mills to install new machinery, railroads to extend their equipment, and farmers to use new farm tools. The result will be an increased production of goods, made possible by the saving and investment; and this increased production will bring lower prices to the consumer.

Savings, moreover, decidedly benefit the working class. As a result of the accumulation of capital, they are constantly being furnished with better tools with which to work, and enabled to increase their production without any increased effort. This increased productivity of labor causes wages to rise, while the increase in the supply of capital causes a fall in the interest rate. Labor rather than capital, therefore, secures a larger share of the increased product.

Obviously, however, investments are not in a position to act as an actual substitute for all benevolence. For how about those undertakings that are not commercially profitable? Many of the greatest needs which exist today are for objects which, in the nature of the case, cannot promise an immediate money return. Their beneficiaries are either ignorant of their own need, unwilling to pay for it, or, more often, unable to pay even if they would. Thus universal education itself would probably not be a paying undertaking if carried on for profit, since many parents are lethargic towards it, and still more are so poor that they cannot afford to pay for the cost of the services which their children receive. Similarly religious education for unbelievers would be a commercial failure, and the poor could never pay for the cost of eliminating poverty.

Needs, therefore, that are not commercially profitable must be met either by the government through taxation or by private parties through voluntary contributions. This brings us to our second objection:

b) The taxation argument—or the theory that “justice rather than charity” demands a public facing of public needs.

The method of raising money through taxation has many real advantages. Among these are: (1) it is compulsory, so that none are able to escape their share; (2) it can be made to yield an assured amount; (3) there is little wastage in collecting it, whereas many charitable un-

dertakings spend a large percentage of their receipts in the expense of collection; (4) it is possible to raise larger sums by taxation than by any other means, since the government has first lien upon all property holdings of the country.

All this is true, but it assuredly does not indicate that taxation can fill the place of all private benefaction. For voluntary agencies have the advantage over governmental ones of greater flexibility and greater power of adaptation to new situations; they are less cumbered by "red tape"; they dare take greater risks and make more radical innovations, since their support comes from a relatively small and enthusiastic group; they do not at every step have to represent the taxpayers at large, and they are weighted with less machinery.

1. Thus voluntary agencies are peculiarly adapted to *experimental* work of all sorts. They can try out reforms for which, in their incipient stages, it would be impossible to secure public funds. Later, when correct principles have been developed and the worth of the undertaking demonstrated, the public can be brought to approve, and the government can extend the work by much larger appropriations.

2. Voluntary agencies, and voluntary agencies alone, can properly represent the philanthropic urge of certain important minority groups in the community, such as religious denominations. Their work could not possibly be carried on with the same zeal (if at all) by the representatives of the public at large, because its interests are too permanently mixed.

3. Voluntary agencies are more "human." They can usually maintain a more personal touch in their administration, and closer relations between recipient and donor. This makes them peculiarly adapted to many forms of eleemosynary benefaction.

4. Finally, voluntary agencies have a better effect upon the character of the donors themselves. They not only stimulate personal generosity and initiative more than can the forced exactions of the government, but they permit the development of an *esprit de corps* in the voluntary carrying out of a common project, which carries over into other fields.

Thus it is futile to look for a time when private philanthropy will no longer be necessary. It is true that its sphere can and should be greatly restricted in certain directions, as the general wealth of the country increases and as governmental agencies grow up to their task. But there will always be new needs for social experiment stations and lighthouses. And meanwhile, while our system of governmental taxation and expenditure is still what it is and our amounts and distribution of wealth what they are, let us use the one method to our hand—that of the private purse—to the full.

The question for the conscientious man then becomes one strictly of quantities and proportions. It is no longer general principles that need trouble him. "Granted that a large amount of philanthropic giving is necessary," he will say, "and granted that purely luxurious expenditure should not be allowed to interfere with it, what is my own reasonable share? How does it compare with that of my neighbor down the street? If I give the amount that seems to be expected of me, shall I not be shouldering part of what should be his reasonable burden?—or sacrificing the investments that the country at large, as well as my own family, needs? That is what disgusts me with the whole present system of haphazard appeal."

Analyzing his complaint a little further, we may see the following outstanding faults in this current "method" of purely impulsive giving.

In the first place, it can give us, as a people, no assurance of mass continuity—of steadiness, that is, in the total volume of donations from year to year. The impulse to give, like all other "raw" human impulses, fluctuates with the spirit of the times. In a period of national or local stress—as in the War just passed—the wave of giving rises very high; while after the passing of the crisis it is only too apt to suffer a severe "slump"—such as we are passing through today.

Moreover purely impulsive benevolence has little tendency to change with the changing cost of living. A ten-dollar contribution in 1910 is fatally apt to remain a ten-dollar contribution in 1920. Hence the *degree of support* of our country's philanthropies is even more subject to fluctuation than are their cash contributions.

In the second place, impulsive giving furnishes us with no assurance of a reasonable distribution of burden among the givers. The natural human impulse toward generosity is shared by rich and poor alike (if indeed the poor do not exceed in it, owing to their closer familiarity with need in its most human and compelling form); and the natural object of that impulse for both classes alike is some concrete bit of human good accomplished. But, alas, concrete amounts of good that are purchasable by money, are purchasable dollar for dollar. The poor man's dollar weighs no more heavily—buys no more concrete good—than does the millionaire's. And he knows it. He cannot help knowing that the amount of suffering he is about to relieve is small indeed. Hence he is apt (other things being equal) to strain himself to the uttermost to do as large a concrete *amount* of good as possible. He buys the satisfaction of his impulse of generosity in a very dear market.

The wealthy man, on the other hand, also sees the concrete effect of his benevolences, and that effect is very large. Hence his naïve (or impulsive) satisfaction bulks very large also. He can give say ten times as much as the man whose income is twenty times smaller than

his, and feel perhaps twice as generous. He buys the satisfaction of his impulses of generosity in a very cheap market.

In the third place, persons who have once been known to give are subject continuously to still further stimulation of their impulse of generosity: they become the "easy marks" of well-intentioned subscription seekers; while those who have once sealed their purses are thereafter shunned, and hence find themselves subjected to ever-decreasing occasions for response.

Fourthly, some of the most important objects of benevolence do not appeal to the impulsive nature at all: more and more they are becoming indirect, technical, and complex—preventive rather than curative, remote rather than immediate. It is only by a growth of the general habit of trusting head rather than heart, information rather than impulse, that they can hope to hold their own in the welter of crude emotional appeal to which the modern man is constantly subjected. Such a habit is immensely fostered by any methodical and thoughtful budgetary system.

We may therefore safely dismiss any temptation to stop and tinker with the old "system" of haphazard. It is merely whipping a tired horse to keep appealing to man's impulsive nature to "give until it hurts" without explaining to him how much he *needs* to be hurt. Whatever general method of giving we do adopt, must at least have the merit of being systematic. We must have our friend go on to ask: "How great actually are the needs that face me and my compatriots today? How much money have we all-told with which to meet them? How much of this money ought to go to keep up our necessary body of investments? To increase them somewhat? How much to maintain our reasonable standards of living? What are those standards anyway? How much, finally, should *I* in *my* circumstances, with *my* sized family, reasonably be able to give?"

It is to the answering of these questions that the present article addresses itself, and in order that the reader may follow the course of the argument, it is worth while without undue anticipation to state the main steps and philosophy of the following chapters.

The starting point of our problem becomes the national charities' budget of which the detailed components will be discussed in the next chapter. For the moment we shall merely take the rough sum total, which is approximately \$1,700,000,000, and see how it might be fitted into the framework of our total national income, our taxes, our necessary investments, and our reasonable standards of living.

First for our total national income. In the year 1921 it amounted probably to about fifty-seven billions of dollars, exclusive of state and local taxes. Federal income and excess profits taxes will absorb approxi-

mately four billions of this amount, while needed investments will, as Chapter III shows, require approximately six billions more.

Deduction must be made, however, from the remaining forty-seven billions, of the sums necessary to maintain the population on at least a subsistence basis. This, as Chapter IV will demonstrate, would amount to approximately five dollars a day for city families of normal size, and probably three to four dollars a day for country families. The maintenance of this standard for the country as a whole would use up slightly over thirty billion dollars, leaving approximately \$17,000,000,000 as the surplus above taxes, investments, and a minimum of life. The \$1,700,000,000 of contributions therefore would be almost exactly 10 per cent of this amount.

The problem then becomes, how to apportion this tenth of the social surplus among the different classes of the population. Various methods are possible, first and simplest among them being the straight proportional method, or the method of the tithe. Here each person (or in this case, family) that is able to contribute at all, is expected to give the same fixed proportion of his income,—one-tenth, the Hebrew law said, and one-tenth echoes the Interchurch World Movement of our day. We have seen that as a matter of fact at present approximately one-tenth of our social surplus is the actual proportion needed for religious and charitable purposes. But the proponents of this theory, of course, do not mean by a tithe a tenth of the social surplus but rather a tenth of each individual's income. And it is just here that the difficulty occurs.

Clearly those who do not receive enough to live on themselves cannot be expected to give away a tenth to others. In other words, there must be some minimum below which gifts should not be encouraged.

It is almost equally evident that all above this minimum should not contribute in exactly the same proportion. Under the tithing system, the man with a two thousand dollar income would have only \$1,800 left after giving away his tenth while the man with a million dollar income would have \$900,000 as a residue. It is obvious that the man with the small income has made a far greater sacrifice than the man with a large one.

With these two difficulties (but especially the second), in view, many persons of a radical turn of mind, would do away with the proportional system altogether, would give up all idea of distributing the burden of benevolence widely, and would derive all contributions (and, for that matter, practically all investments) from the upper economic classes alone.

Commonly the proposal is to set a fixed maximum of income at say

five or six thousand dollars, remove all above that, and leave all those below free.

The trouble with such a proposal is of course in the first place that no one who was in a position to obey its behests would take it very seriously: it is too subversive of all our present standards of American life and industry; and in the second place that it is based upon a one-sided premise: it considers only the question of mechanical equality of sacrifice, not that of total satisfaction or well-being. In other words, it is not only weak industrially but psychologically. A good system of distribution ought (1) to disturb the framework of our industrial and social life as little as possible. It ought to presuppose as few alterations as possible in public opinion, since any sacrifices that it demands have to be entered into voluntarily. (2) It ought to consider the state of mind of any large classes of donors it proposes to exclude. What of their native impulses toward generosity and unselfish *esprit de corps*? Are these permanently to be balked? Even supposing that by "radical" arguments we succeeded in discouraging them from functioning, should we not be depriving their possessors of more than we gave? (3) Finally, what of the form of control we are assigning to the charitable institutions themselves? If we reduced their membership to representatives of the upper economic class alone, should we not be losing all the advantages of democratic management? Do not men of moderate means deserve a voice in the conduct of benevolent as well as of political institutions? And have they no peculiar contributions of thought to make to them?

Looking at all these considerations together, many persons of recent years have been led to advocate a compromise method of charitable distribution, best pictured by an ascending curve of percentage contributions, somewhat after the fashion of our present federal income tax scale. Such a progressive scale has the advantage of allowing both for wide distribution of gifts and for the relative ability of the givers to pay. A good example of such a scale is to be found in the interesting pamphlet "Twenty-Four Billion" published in 1918 by the Bankers' Trust Company of New York. Its authors attempted to assign the proper amount of Liberty Bonds and of war charities to be subscribed to by the various classes of the population in addition to their federal income taxes. Their method was to draw a logarithmic curve beginning with a 12 per cent average contribution for all family incomes under \$2,000 and rising to a maximum of 90 per cent contribution (this included about 70 per cent of taxes) for incomes of a million or over. The total amount to be collected was so huge—\$24,000,000,000—that they evidently considered themselves justified in demanding a relatively heavy contribution from the large number of families at the lower end

of the scale; while for the sake of avoiding undue industrial dislocation (and, it may be, criticism from the wealthier classes), they assigned no final limit to the amount of income that might be retained at the other end of the scale.

Now if we attempt to draw a similar scale for our far smaller total of peace-time charities (taking explicit account, however, of investments as well as taxes), we shall have the advantage of freedom from both these handicaps: we need not assume a heavy percentage of giving from the almost submerged classes at the bottom of our scale, and, equally important, we need not allow an indefinite amount of increase to the income of the already rich. We are therefore at liberty to taper our scales off more sharply at either end, setting a submergence minimum for the very poor and a relative luxury maximum for the wealthy. The point for the submergence minimum will be fixed rather definitely by forces beyond our control—by the basic demands of food, clothing, and shelter at current prices; but the point for the relative luxury maximum we must necessarily set ourselves, and set, it may seem, somewhat arbitrarily, taking into consideration the sacrifices of the less wealthy groups all along the line, and the fixed needs of our total budget.

CHAPTER II

A NATIONAL BUDGET FOR PHILANTHROPIC PURPOSES

Any attempt to build up a standardized philanthropic budget for our country as a whole is bound to be attended with many pitfalls. In the first place, only a small percentage of the items are susceptible of exact calculation, while secondly the items themselves are continually changing, so that there is danger of the interested assessor seeing "tendencies" and "trends" in the directions which he personally favors. The present estimate does not aim to present an idealized picture of what our charities in some golden age of benevolence ought to be, but what in the next few years they actually must be if we are to maintain our national place in health, education, spiritual life, and material well-being. It seeks accordingly to stick closely to existing facts and to base its recommendations upon the realities of modern charitable expenditure.

This is true in at least two ways:—First, only those items are included which have already won a large measure of public support. There are doubtless many objects omitted which some readers would like to have included, and there are others included which some would like to have omitted. Yet no person or group of persons can prescribe the objects for which they believe the public should contribute. The only safe course is to take those causes to which the public is already contributing and determine their needs. As a matter of fact there is sufficient variety in the list of items to ensure practically everyone an opportunity to contribute to the cause or causes which he cherishes most. Naturally it is not proposed that a Protestant should contribute to the support of the Catholic Church or that an ardent anti-vivisectionist should give money for medical research. But they cannot plead on that ground that their total contributions should be decreased, since the institutions and causes in which they do believe have full need for their support. Thus the very fact that Protestants cannot be expected to contribute to Catholicism means that in turn they must bear the full burden of supporting Protestantism. Secondly, we have endeavored to deal with the realities of the situation by securing so far as is possible the statistics of actual contributions for the country's various charitable purposes and using these as a starting point in the construction of our estimates. Wherever the material has been especially scanty, we have tried to minimize the error by dividing each item into as many component parts as possible and estimating each item separately.

We have not, however, attempted to confine our estimate solely to the actual amount of the present cash contributions, even where these

are available, for the reasons already alluded to in our first chapter:— (a) The high cost of living has affected benevolent objects as well as all others; but it has not equally loosened the purse strings of their supporters. On the contrary, many who felt the pinch of rising prices took that as a legitimate excuse for reducing their donations. Similarly with men of wealth who for the first time felt the inroads of the increased income and excess profits taxes. That proportion of the population, on the other hand, that actually benefited by the increase in prices usually had their standards of living upset in the direction of useless luxury. It is probably fair to say that the war profiteers, both rich and poor, of the last few years, have furnished the poorest material for constructive philanthropy that our country has known for a long time. (b) Added to this is the general loosening of morale which came once the war was ended and the danger removed. (c) It is furthermore unescapably true that our benevolences have always been chronically undersupported. The very fact of this chronic undersupport is indeed the chief reason for attempting to construct a budget and scale of responsibility at all.

The authors have therefore felt at liberty to increase existent figures of giving, not only to an amount that would ensure existent objects a degree of support equivalent to what they were receiving before the war, but in a majority of cases to a figure moderately above this level. Whatever increases were thus granted, however, have been conservatively estimated in the light of objective standards set up by experts, and indeed, in many instances, have been scaled down considerably to allow for an increased efficiency in administration. The authors have, therefore, constructed the following table as their estimate of the minimum amount which should have been given in the United States in 1921 for religious and charitable purposes on the basis of the price level prevailing at the beginning of that year. Naturally, in a subject so dependent upon personal judgment, the nature and amount of the budget must inevitably vary to some extent with the person who constructs it, but it is the belief of the authors that their total is a reasonable minimum. Much more could be given to great advantage, but it is difficult for the authors to see how any less could be given, although there might be readjustments among the items.

The amounts needed from year to year will of course vary with the general world situation, the price level, and the productivity of industry, but the estimates as given should prove at least tolerably accurate for the year 1921. The detailed data upon which each estimate is based are given in the notes to this chapter. They may there be examined by the student, while the more casual reader may turn from the following table to Chapter III where the main argument of the essay will be continued.

TABLE I.—A NATIONAL BUDGET FOR PHILANTHROPIC PURPOSES FOR 1921.

<i>Object</i>	<i>Minimum Amount Required (in \$)</i>
I. Religious Purposes	836,000,000
1. Protestant Denominations	500,000,000
2. Roman Catholic Church.....	250,000,000
3. Jewish Congregations	30,000,000
4. The Y. M. C. A.....	15,000,000
5. The Y. W. C. A.....	8,000,000
6. The Knights of Columbus	8,000,000
7. Miscellaneous Faiths and Organizations	25,000,000
II. Organized Charitable Relief in the United States	199,000,000
1. Institutional Care of Children.....	73,000,000
2. Institutional Care of the Aged.....	50,000,000
3. Institutional Care of the Blind and Deaf	1,000,000
4. Outdoor Relief or Service.....	75,000,000
III. Health	158,000,000
1. Hospitals	126,500,000
2. Dispensaries	7,500,000
3. Public Health Nursing.....	9,000,000
4. Medical Research	10,000,000
5. Health Education	5,000,000
IV. Play and Recreation	15,000,000
V. Education	145,000,000
1. Colleges and Universities	100,000,000
2. Private Secondary Schools	5,000,000
3. Negro Education	24,000,000
4. Scholarships for Needy Children.....	15,000,000
5. Experimental Schools	1,000,000
VI. The Fine Arts	20,000,000
VII. Miscellaneous Reform Organizations.....	10,000,000
VIII. Direct Personal Gifts to Individuals.....	200,000,000
IX. Foreign Relief	166,000,000
1. Armenia and the Near East.....	35,000,000
2. Austria	20,000,000
3. Poland	15,000,000
4. Germany	10,000,000
5. The Baltic States	4,000,000
6. Russia	40,000,000
7. Italy	7,000,000
8. The Balkans	10,000,000
9. China	20,000,000
10. Ireland	5,000,000
Gross Total	1,749,000,000
Less Income from Existing Endowments not Otherwise Cared for	30,000,000
Net Total	1,719,000,000

NOTE TO CHAPTER II

SUPPORTING DATA FOR ESTIMATED MINIMUM DONATIONS

I. Religious Purposes. \$836,000,000.

1. Protestant Denominations.

There are today approximately 25,000,000 members of the various Protestant Churches.¹ The budget drawn up for these churches is based on the following requirements:

a) Ministerial Salaries. There are approximately 60,000 full-time Protestant ministers in the country whose annual average salary in 1916 was \$1,078.² This amount was notoriously insufficient even then, but by January 1, 1921, the cost of living had increased at least 90 per cent, so that it required at least \$2,150 to equal the 1916 average. Allowing an average salary of somewhat less than this, or \$2,000, for ministers engaged in pastoral work only, we have a total requirement for this purpose alone of \$120,000,000. There are in addition to these full-time ministers approximately 110,000 pastors who devote only a part of their time to church work.³ Assuming, in the absence of reliable data, that these 110,000 work on the average half time, we should presumably assess them at half salary or \$1,000 apiece. That adds another \$110,000,000 to our salary budget, making it \$230,000,000 all-told.

b) Ministerial Pension Funds. An annual retirement of one thirtieth of the profession at half-pay (together with some supplementary provision for those still living who have previously been retired with insufficient protection) would entail an expense of at least \$10,000,000 annually, and probably much more than this.⁴

c) Upkeep and Maintenance of Church Buildings. In 1916 approximately \$60,000,000 was spent in the upkeep and improvement of church buildings. At January, 1921, prices, this would have amounted to well over \$150,000,000, but by rigid economy and a reduction in the quality of construction, could have been curtailed to \$100,000,000.

d) Home and Foreign Missions. The Interchurch World Movement representing thirty denominations which included 60 per cent of the membership of all Protestant Churches, fixed the amount to be paid in for home missions by coöperating denominations during 1920 at (in round numbers) \$57,000,000, and \$63,000,000 for foreign missions, or a total of \$120,000,000.⁵ This would have amounted to an eight dollar contribution on the

¹ *Yearbook of the Churches*, edited by S. R. Warburton, published by the Federal Council of Churches of Christ in America, pp. 197-202.

² *Report of United States Census Bureau on Religious Bodies* (published in 1919), Vol. 1, p. 72.

³ Obtained by subtracting the number of full time ministers listed by the census study from the total number given by the Church Yearbook.

⁴ Ultimately, of course, the provision of adequate salaries would remove the necessity for special pension funds. Even if such a scale should go into effect immediately, however, there would be many years during which retiring ministers would be unable to care for themselves because of the previous low salaries.

⁵ For the full details of the Interchurch World Movement budget by denominations and purposes, see the *Interchurch World Bulletin*, March 13, 1920.

average for these purposes by the members of the coöperating churches, and had the Protestants outside the movement given at the same rate, \$80,000,000 more or a total of \$200,000,000 would have been raised.

It is undoubtedly true that this amount could have been used to excellent advantage in both the home and foreign mission fields and that it represented the best judgment of experts. In our necessarily conservative budget, however, we cannot allow such a great increase from the present rate of giving to these objects—which now amounts to \$18,000,000 for home and \$29,000,000 for foreign missions, or a total of \$47,000,000. We have accordingly reduced the Interchurch Budget by 35 per cent and assume a total of \$130,000,000. Below this figure it is hardly possible to go, since it is notorious that current contributions have not begun to meet the tremendously increased cost of the work. Thus the contributions to home missions actually decreased slightly between 1916 and 1919 and those for foreign missions increased 75 per cent, while the cost of living in this period has nearly doubled at home and considerably more than doubled abroad.

The remaining margin of difference between the sums here assigned and the cost of living increase applied to former gifts is to allow for a very moderate extension of activity along the lines of normal growth.

e) All other functions. These include such items as the work of church bodies, the holding of conferences, church publications, and miscellaneous activities. We do not, however, include under this category the educational or benevolent work of the churches. In 1916 the miscellaneous expenditures for these miscellaneous purposes was approximately \$18,000,000.⁶ It would require almost double this amount to carry on the work today, but (on the supposition that there was some waste in administration) we will assume only \$30,000,000 for this purpose.

The total for all these items is \$500,000,000, or something over double the amount given to the Protestant churches for these purposes in 1916, but for the reasons mentioned—primarily the rise in living costs—it is a most conservative estimate.

Many people will doubtless complain that there are too many ministers and churches now, and that not all need be supported. It is undoubtedly true that some localities are over-churched and over-ministered. There are, however, many localities in the country that have either inadequate church provision or none at all, so that taking the country as a whole, there is in all probability not an excess of ministers or of church buildings. With proper distribution, indeed, an even larger number would doubtless be required.

2. *The Roman Catholic Church.*

There are approximately 17,500,000 members of the Roman Catholic Church in this country.⁷ This number, however, includes children baptized but not confirmed, and hence is not strictly comparable with the statistics of membership for the Protestant churches which include communicants only. Deducting 15 per cent from the Catholic Church rolls to allow for this,⁸ we should have a figure of approximately 15,000,000 which may be

⁶ *Report of United States Census Bureau on Religious Bodies*, Vol. 1, pp. 56-57.

⁷ *The Yearbook of the Churches*, op. cit., p. 201.

⁸ This was done by the Census Bureau in its study of Religious Bodies.

compared with the Protestant statistics. An equal per capita contribution to that allowed the Protestant denominations would amount to \$300,000,000. Since, however, the Catholic parishes are somewhat larger and hence subject to less overhead, and their clergy are unmarried, a somewhat smaller sum would presumably suffice, which we will set at \$250,000,000.

3. *Jewish Congregations.*

According to the *Jewish Yearbook* there were approximately 3,400,000 Jews in the country in 1919.⁹ While the Jewish faith largely coincides with the Jewish race, a large number of Jews have given up their religious connections. It would be most conservative, however, to list at least two million as still actively affiliated.¹⁰ Hence an annual budget of \$80,000,000 for religious purposes would appear to be most moderate. This would be a 25 per cent smaller per capita contribution than that allowed the Protestant faiths, and it seems conservative when we consider that in New York City alone, \$15,000,000 was spent by Jewish organizations in 1917, the greater part of which went for religious purposes.

4. *The Young Men's Christian Association.*

In 1919 the Y. M. C. A. received a total of \$9,642,000 in membership dues and contributions. With this sum they carried on a large work along physical, educational and religious, as well as social, lines. However, they were sorely cramped in each of these fields for lack of funds.¹¹ Thus, less than 30 per cent of the associations reporting for 1919 were able to afford any gymnasiums, only one-third carried on regular exercise classes, less than one-tenth had any fields for outdoor athletics. In educational work, the total number of paid teachers and leaders amounted to only one for every four associations, assisted by volunteers numbering about one for every seven or eight associations. Finally, in religious work, for a total of nearly 130,000 students in Bible and training classes, they had something under 5,000 teachers, of whom about one-third were officers of the association—a total of one partially paid teacher for every 100 students. To give another 30 per cent of the Associations their needed athletic equipment, to raise the number of paid teachers in the educational department to one for every two or three associations, and to take up the slack in the religious work, would cost not less than six or eight millions more. Cutting this sum down to five millions for the sake of conservatism, we would have a total minimum budget of \$15,000,000.

5. *The Young Women's Christian Association.*

The strictly businesslike budget of this organization for the year 1920 was \$23,000,000, of which \$19,000,000 was to be expended by local organizations, \$3,000,000 by the national body and \$1,000,000 for development work.¹² Eliminating income from the commercial aspects of the work, such

⁹ *Jewish Yearbook*, 1919-20, p. 605.

¹⁰ In the Jewish Congregations formal membership is generally restricted to heads of families. The total number of members is estimated by the Church Yearbook as 260,000.

¹¹ See *Yearbook of the Churches*, 1920, pp. 225 and 226.

¹² Facts and Figures of Y. W. C. A. Finance.

as dormitory rentals, etc., the annual amount to be raised by contributions will total at least \$8,000,000, and we accept this sum as our own estimate.

6. *The Knights of Columbus.*

The Knights of Columbus spent over \$16,000,000 in their war work which lasted slightly over a year. They have been active ever since, operating on a greatly enlarged peace-time program. Substantially, half their war appropriations should suffice to carry this on.

7. *Miscellaneous Faiths and Organizations.*

Among the other faiths are the Greek Catholic and the Polish National Catholic Church, the Christian Scientists and the various schools of Theosophists. Among the organizations may be mentioned the Salvation Army, the Young Men's Hebrew Association, the Epworth League, and the myriad of societies affiliated with particular denominations. An approximation of \$25,000,000 for all these organizations would be most conservative.

II. *Organized Charitable Relief in the United States.* \$199,000,000.

While there are no accurate statistics concerning the amount annually contributed in this country through organizations for the relief of the needy, there are, nevertheless, some studies which enable one to make some fairly accurate estimates, both as to the amounts which are actually given and those which are needed. We may divide the organized private relief in this country into four classes: (1) the institutional care and supervision of children; (2) institutional care and supervision of adults and old people; (3) institutional care of the blind and deaf; (4) outdoor relief or service, i.e., assistance rendered the needy in their own homes. Each of these will now be considered in turn.

1. *Institutional Care or Supervision of Children.*

Institutions or organizations for children may be divided on the basis of management into two main groups: those managed by public authorities and those managed by private bodies. Not all of the funds of the latter group are raised from private sources since many of them receive governmental aid. We are concerned here, however, only with the amounts that must be voluntarily given adequately to maintain the work.

The best study of the amount of money expended for the institutional care of children and the proportionate number of children in each state who were cared for in institutions is that made by Dr. Hastings H. Hart. Using statistics for 1912 for seven states and the District of Columbia, he showed that the following conditions then prevailed:¹³

State	Current Expenses, Children in all Institutions, per 100,000 Population.	Number of Children in all Institutions per 100,000 Population.
District of Columbia....	\$114,500	494
New York	88,100	531
California	71,500	372
Massachusetts	60,000	236
Pennsylvania	54,600	285
Maryland	51,800	339
Ohio	42,100	327
New Hampshire	42,000	319

The average¹⁴ total cost for all these states is \$70,000 for every 100,000 inhabitants. It is perhaps true that this is somewhat higher than the average amount actually spent throughout the rest of the country, but certainly no one can question the necessity of at least reaching this level.

The problem which immediately presents itself is that of determining the proportion of this amount that is defrayed from public funds and that which is met from private gifts. It has been found for the three states of California, New York, and Pennsylvania that private parties were compelled to meet approximately 45 per cent of the total expenses.¹⁵ It is probable that this would be much higher for the country as a whole, since these three states make larger grants to private institutions than practically any of the others. But applying this proportion to the 1912 standard of \$70,000 expenditure for every 100,000 people, we arrive at the figure of \$31,500 as the minimum amount which should be met from private sources. This is, however, upon the basis of 1912 prices. It is most conservative to estimate that the expenses of maintenance have at least doubled since then, and that in order to maintain this standard today, twice as much or \$63,000 per 100,000 of population is needed. This, upon the basis of the 1920 population, would total \$65,500,000.

This, however, makes no allowance for improving the standard of child care that prevailed a decade ago. An allowance of 10 per cent for this factor seems most conservative and would probably be admitted by all, which brings the necessary total up to \$73,000,000.

2. Institutional Care and Supervision of the Aged.

The Massachusetts Commission on Old Age Pensions, Annuities, and Insurance reported in 1911 that 41,212 or 23 per cent of the 177,000 men and women in that state over sixty-five years were dependent.¹⁶ Applying the same ratio to the rest of the country, Squier has computed that there were approximately 1,125,000 in the country as a whole who were in this situation.¹⁷ For the care of these aged dependents \$784,000 was spent in benevolent homes in Massachusetts, which at the same rate would total \$21,400,000 for the United States as a whole. This at the present scale of prices would amount to approximately \$43,000,000. With the increase in population, however, during the last decade, there has undoubtedly been an increase in the absolute number of aged dependents, which would necessitate an expenditure of at least \$5,000,000 more,—a total of \$48,000,000 if the aged poor are to be treated as well in private benevolent homes as they were in 1911. It is only proper, however, that care should be improved by at

¹³ H. H. Hart, Introduction to W. H. Slingerland's *Child Welfare Work in Pennsylvania*, p. 4.

¹⁴ That is, the weighted average.

¹⁵ This has been computed from data given in W. H. Slingerland, *Child Welfare Work in Pennsylvania*, pp. 4, 5, 24, 76, 91, 101, 230-31; and in W. H. Slingerland, *Child Welfare Work in California*, pp. 133, 138.

¹⁶ Report of Massachusetts Commission on *Old Age Pensions, Annuities, and Insurance*, p. 45.

¹⁷ L. D. Squier, *Old Age Dependency in the United States*, p. 6.

least 10 per cent, which would necessitate an expenditure of \$52,800,000. This can perhaps be scaled down to \$50,000,000.

This sum includes only amounts spent in private benevolent homes and does not include private outdoor relief to the aged poor.

3. *Institutional Care of the Blind and Deaf.*

There are probably somewhere between sixty and seventy thousand blind persons in this country.¹⁸ While the vast majority are dependent upon others for support, probably not over 3 per cent are in private institutions in those states where there are special homes,¹⁹ and such a percentage for the country as a whole would seem to be a reasonable minimum. This would amount to approximately 2,000 people and a total annual expense of about \$1,000,000. Although the amounts spent for the deaf would increase this figure, the sums for the aged blind already cared for in the homes for old people would balance the increase. It is probably fair, therefore, to take \$1,000,000 as the needed sum.

4. *Outdoor Relief and Service.*

It is practically impossible to determine the amount of assistance given the poor in their own homes by private agencies. In Chicago, the various accredited relief organizations spent in 1920 approximately \$2,000,000, or about 75 cents per inhabitant.²⁰ In New York probably about the same relative amount, or perhaps a somewhat higher figure is spent for these purposes,²¹ while in Philadelphia and Boston the proportion is somewhat less. To this should be added the sums contributed by churches in the form of relief. Now while the need for such assistance is probably greater in the metropolitan cities than it is in the smaller cities and in the country, the funds which they do expend are but a small fraction of the amounts needed to relieve the urgent needs which they face.

It seems most conservative, therefore, to set \$75,000,000 or a little over 70 cents per person as the irreducible minimum for the country as a whole. This seems especially conservative when we take into account the fact that in 1911 the country, on the basis of the Massachusetts figures, was spending \$8,700,000 in the form of private outdoor relief to the aged poor over sixty-five.²² This, at the 1920 level of prices, would have amounted to \$17,500,000 alone, and allowing for the increase in population would total nearly \$20,000,000. We are probably underestimating, therefore, rather than overestimating when we take \$75,000,000 as our necessary figure.

¹⁸ See Harry Best, *The Blind*, pp. 5-6.

¹⁹ *Ibid.*, p. 75.

²⁰ See, *A Classified List of Local Philanthropic and Charitable Organizations*, 1921 (published by The Chicago Association of Commerce), pp. 68-73.

²¹ See *Reports* of The Charity Organization Society, The New York Association for Improving the Condition of the Poor, The Brooklyn Federated Charities, and The United Hebrew Charities. To these should be added the expenditures of the various Catholic agencies, the Salvation Army, the Volunteers of America, and many other relief organizations.

²² Squier, *op. cit.*, p. 6.

III. Health. \$158,000,000.

1. Hospitals.

The hospital needs of the country can be summed up under two main classes,—those for adequate maintenance and those for extension.

Maintenance. There are now approximately 700,000 beds in the various hospitals of the country.²³ The editors of the periodical, *The Modern Hospital*, after a country-wide investigation, have found that the average annual operating cost per hospital bed is \$791.²⁴ This, however, is presumably upon the basis of the beds being occupied to full capacity throughout the year. Using the above estimate as a basis of computation, the total operating cost of all the hospitals of the country would reach the staggering sum of \$563,000,000.

Allowance, however, should be made for the reduction in expenditures caused by the fact that the beds are idle during some portion of the year. Many expenses of course continue irrespective of whether the beds are occupied or not, but many, such as food, etc., vary almost directly with the number of patients. It is probably safe to set \$500,000,000 as the annual cost of operation.

What proportion of this must be met from private donations? The best light upon this question is that thrown by the United States Census Report on Benevolent Institutions, which was published in 1913. This investigation showed, for the hospitals studied in 1910, that of the \$66,000,000 of total receipts, \$9,100,000 or 13.7 per cent came from private donations.²⁵ On the assumption that the same percentage would have to be raised today, we should have a total of \$68,500,000 which it is necessary to secure from private sources, if the existing hospital facilities are to be maintained adequately.

Extension. It is not enough, however, merely to maintain existing hospital facilities. It is also necessary to increase them so that they may more nearly meet the needs for hospital care. The sickness censuses made by the Metropolitan Life Insurance Company have shown that between 2 and 3 per cent of the population are sick at any one time, exclusive of those suffering from minor illnesses and those who are not truly incapacitated for work. The total daily number of the more seriously ill can therefore be estimated as somewhere between 2,100,000 and 3,150,000. Now, naturally, not all these people need be cared for in hospitals. It is, however, being recognized that in general the hospital is a much better place to care for the sick than is the home and there is an increasing strain upon the hospitals.

²³ The Modern Hospital Publishing Co., after a careful survey, places the number of beds in the hospitals proper as 695,698. See their pamphlet, *The Hospital Field*, p. 12. The American Medical Association fixes the total number as 817,200. See the *Journal of the American Medical Association*, April 16, 1921, pp. 1083-1104. This apparent discrepancy is explained by the fact that the American Medical Association included as hospitals such institutions as homes for the aged, for the deaf and blind, etc., that contained approximately 100,000 beds. These were not included in the study of *The Modern Hospital*. When allowance is made for this the reports show a quite surprising similarity of totals.

²⁴ *The Hospital Field*, op. cit., p. 14.

²⁵ *Report of United States Census Bureau on Benevolent Institutions (1910)*, p. 79. This plainly does not include income from endowments.

Dr. A. C. Burnham believes that approximately one half of these cases should be cared for in the hospitals, and that therefore there should be at least one bed capable of receiving patients for every 100 people.²⁶ This would mean a total of 1,050,000 beds in the United States as a whole.

Dr. M. M. Davis believes that this standard is too high.²⁷ It is probable that matters could be quite satisfactorily handled with one bed capable of receiving patients for every 150 people, and that a total of 700,000 beds would suffice for the country.

At first sight, it must seem that the total of 700,000 beds which we now have is just sufficient to meet these needs and that no more beds are needed. The need, however, is for the so-called "active beds," or those capable of receiving acute medical or surgical cases. Beds in hospitals for incurables or for those suffering from nervous or mental diseases would be valueless for the particular purpose under consideration, and these are approximately 290,000 in number. This leaves the number of active beds²⁸ as 410,000 or one for approximately every 255 people.²⁹ It is impossible to utilize all the beds to full capacity and thus cut down appreciably the number of additional beds that are needed. This is caused by the fact that hospitals, like many businesses, are characterized by periods of peak loads, caused in their case by epidemics and by the greater amount of illness in the first half of the year; also because certain wards must be designated for specific diseases and not pooled for all patients; and finally, because time must be allowed for repairing, cleaning, and disinfecting the hospital plant.

It is necessary, therefore, that approximately 290,000 additional beds be provided if we are to cope with the essential demand for hospital care. No one of course would advocate that this standard be attained all in one year, but it is only reasonable that it should be attained at the end of ten years and that one-tenth of the necessary number, or 29,000, should be added each year. The average investment in buildings, grounds, and equipment was found by *The Modern Hospital* to be slightly over \$4,700 per patient bed.³⁰ Taking \$4,000 as a most conservative estimate, we have a necessary annual capital outlay of \$116,000,000.

Now, a far larger share of contributions is needed from private parties to construct and equip hospitals than to maintain them. Probably only a small percentage of hospitals are paying propositions. The average hospital can count itself fortunate if its ordinary sources of income (including current donations) are sufficient to pay its running expenses and meet the depreciation charges. Little or nothing can be accumulated for plant extension. Practically all of the funds for new building and equipment must come from either public appropriations or private donations. While any precise allocation of the burden between these two sources is plainly impossible, it is probably roughly correct to estimate that at least one-half, or approximately \$58,000,000, must be raised annually from private sources.

²⁶ Dr. A. C. Burnham, *The Community Health Problem*, p. 12.

²⁷ See his review of Dr. Burnham's book, *The Survey*, April 16, 1921, p. 89.

²⁸ This includes not only beds in the general hospitals but those in the surgical, tuberculosis, children's, maternity, eye, ear, nose and throat hospitals as well.

²⁹ The ratio naturally varies greatly from state to state; thus in Mississippi it is one to 887 and in Wyoming one to 17. *The Hospital Field*, *op. cit.*, pp. 7-8.

³⁰ *The Hospital Field*, *op. cit.*, p. 13.

2. Dispensaries.

Davis and Warner, in their admirable work on dispensaries, estimated that there were approximately 3,000 dispensaries in 1917, with total visits of from twelve million to fifteen million annually.³¹ Since then the number and use of dispensaries have increased rapidly and it seems conservative to estimate that fifteen million visits are made to privately managed dispensaries. The average cost per visit, if no salaries were paid to clinical physicians, was estimated by Davis and Warner as 50 cents for hospital dispensaries and much higher for dispensaries not attached to hospitals.³² If physicians were paid, the cost would probably be at least 50 cents more a visit.³³ It is, of course, only proper that they should be so paid and we may then estimate the necessary cost in 1917 as at least \$1 per visit. How much of this can the patients be reasonably expected to pay? Davis and Warner estimate, after a study of many clinics, that the patients' fees can be expected to meet approximately one-half of the expenses.³⁴ This means that private donations should amount to approximately 50 cents a visit, or a total of \$7,500,000 for the country as a whole.

3. Visiting and Public Health Nurses.

There has been a great development of public health and visiting nursing within the last decade, which is shown by the following table.

GROWTH OF PUBLIC HEALTH NURSING IN THE UNITED STATES.³⁵

Year	Organizations	Nurses
1891	58	130
1905	200	400
1914	1992	5152
1919	3094	8770

These figures include industrial nurses as well as purely visiting nurses. It is probable, however, that there are well over 5,000 visiting nurses in the country.

Dr. Burnham states that one such nurse for every 3,000 persons in a community is none too many, and that in the rural districts the number of people for every nurse should be smaller.³⁶ This would mean that there should be between 35,000 and 40,000 visiting nurses in the United States as a whole. It would be plainly impossible to obtain this standard at once, but it is most conservative to set 10,000 as the number that should be reached within the year.

How much of a private subsidy would be needed to support these nurses? If her district is properly de-limited, a nurse can make approximately six visits a day. The cost per visit was estimated before the war as ranging

³¹ Davis and Warner, *Dispensaries*, p. 37.

³² *Ibid.*, p. 266.

³³ *Ibid.*, p. 270.

³⁴ *Ibid.*, p. 274.

³⁵ Compiled by the National Organization for Public Health Nursing. For the earlier period of development, see Y. Waters, *Visiting Nursing in the United States*, 1912.

³⁶ Dr. A. C. Burnham, *The Community Health Problem*, p. 49.

from 50 to 75 cents,³⁷ and today it is probably at least one dollar. It seems only reasonable to estimate that the patients should contribute one half of this expense, as was found equitable in the case of dispensaries, which leaves approximately \$900 a year per nurse to be met from private donations. This, for 10,000 nurses, would amount to \$9,000,000, which we may accept as a necessary minimum.

4. *Medical Research.*

Medical research work of great value is already being done. The Rockefeller Foundation in 1917 spent approximately \$4,000,000 for this purpose and for public health work.³⁸ The fields of possible service before this branch of medicine are practically unlimited. Millions of lives have been saved by the researches of Walter Reed and General Gorgas into the causes of yellow fever, while investigations into the hookworm disease and typhus have already saved an incalculable number of lives. Equally important discoveries await us in the fields of cancer, infantile paralysis, and pneumonia research, and in many other lines as well—held back only by the lack of proper laboratories, clinics, and funds to engage a sufficient corps of experts. On a basis of human importance alone, therefore, appropriations of \$20,000,000 or \$30,000,000 would certainly not be excessive. However, so far donations for this purpose have come almost entirely from the wealthy, who form but a fraction of our giving public. Hence for the present a total of \$10,000,000 in addition to the income from present endowments is probably as much as can be expected.

5. *Health Education.*

Excellent work is now being done by various private health agencies in spreading knowledge concerning the prevention and care of disease. Among these may be mentioned the American Social Hygiene Society, the National Mental Hygiene Society, the National Tuberculosis Association, the various state and local Child Welfare Associations, and other agencies. Such bodies are needed in every state and locality to supplement the work of public organizations and to popularize existing medical knowledge. The necessary expense of printing, lecturing, and organizing will require at least \$5,000,000 annually.

IV. *Play and Recreation.* \$15,000,000.

In Chicago, a city unusually equipped with public parks and playgrounds, over \$650,000 was spent in 1920 by accredited private organizations for recreational purposes.³⁹ This was an expenditure of approximately 25 cents per person, and a proportionate expenditure throughout the country would amount to something over \$26,000,000. It is probable that this would not be excessive, but since the need is probably less in smaller localities, we may perhaps accept \$15,000,000 as a more proper sum.⁴⁰

³⁷ Dr. A. C. Burnham, *op. cit.*, p. 49.

³⁸ *Report of the Rockefeller Foundation for 1917*, pp. 46-47.

³⁹ *A Classified List of Local Philanthropic and Charitable Organizations*, *op. cit.*, pp. 74-83. This includes expenditures for settlements, boys' clubs, girls' homes, etc.

⁴⁰ The total amount here allotted for organized relief, health, recreation, and the Young Men's and Young Women's Christian Associations amounts to \$395,000,000.

V. Education. \$145,000,000.

1. Colleges and Universities.

The crying need of our institutions of higher learning for increased endowment and income is notorious. The increase in prices within the last few years has cut in half the purchasing power of fixed endowment funds and salaries which were all too scanty even then. Private philanthropy can not of course be expected to bear the burden of the support of public institutions—that duty devolves upon the states—but without its aid, the education given in private institutions will inevitably greatly deteriorate.

There were in 1917-18 approximately 245,000 students in the private colleges and universities of the country,—a number over twice as great as that in the public institutions of higher learning.⁴¹ The great influx of students after the war undoubtedly brought the enrollment in the private institutions by the fall of 1920 to somewhat over 300,000.⁴²

The average cost of instruction per student for which we have the most recent record is \$365 a year.⁴³ An increase of one quarter in this amount, or an average of \$455 a year, would be a most moderate minimum standard. Student fees cannot be expected to meet much more than one half of this and probably should not exceed this proportion.⁴⁴ Government grants to

The authors have collected statistics from thirty-four cities with financial federations of varying degrees of inclusiveness and with a total population in 1920 of over 6,600,000. We find that the total amount contributed through these financial federations, in the last year for which there is record, was \$18,056,000, or \$2.81 per person. Since there were many organizations in a large percentage of the cities which were outside the federations, an estimate of between \$3.50 and \$4.00 per capita as the probable contribution in these cities to these causes is conservative. The same rate of contribution for the country at large would amount to between 368 and 422 millions. In the light of what has actually been done in these cities with a mere improvement in the technique of raising funds, our estimated allotment for the country as a whole seems moderate. The cities investigated were Denver, Colorado; South Bend, Indiana; Cedar Rapids and Des Moines, Iowa; Emporia, Kansas; Louisville, Kentucky; Bay City, Detroit, Flint, Grand Rapids, Kalamazoo, Lansing, and Saginaw, Michigan; New Bedford, Massachusetts; Minneapolis and St. Paul, Minnesota; Kansas City and St. Joseph, Missouri; Plainfield and the Oranges, New Jersey; Buffalo, Elmira, Jamestown, Rochester, and Rome, New York; Akron, Cincinnati, Cleveland, Dayton, and Middletown, Ohio; Oklahoma City, Oklahoma; Erie, Pennsylvania; Parkersburg, West Virginia; and Milwaukee, Wisconsin.

⁴¹ "Statistics of State Universities and State Colleges," *United States Bureau of Education, Bulletin No. 87*, 1919, p. 21.

⁴² George F. Zook in *School Life* (the periodical published by the U. S. Bureau of Education), March 1, 1921, p. 2, estimates that the enrollment in private institutions of higher learning increased 20 per cent from 1916 to 1919. Since the 1916 enrollment was approximately 255,000, this would mean an attendance of something over 305,000. To this should be added the increase in 1920 over 1919.

⁴³ Zook, *op. cit.*, p. 2.

⁴⁴ In 1917-18, the receipts from students' fees and other sources comprised 54 per cent of the total income of private institutions. *United States Bureau of Education, Bulletin 87*, 1919, *op. cit.*, p. 23.

private institutions will be of some assistance,⁴⁵ but it is difficult to see how anything less than \$200 income per student from private philanthropic sources will suffice. This estimate is corroborated by an investigation made by Dr. C. H. French for the American Association of Colleges. Writing over two years ago, Dr. French estimated that in private colleges an annual income from endowment or private sources of at least \$200 per student was necessary if a minimum standard of efficiency was to be maintained.⁴⁶

Such an amount for the over 300,000 students in private institutions would mean that an annual income of something over \$60,000,000 is needed from endowments or current gifts. This would necessitate a total endowment of \$1,200,000,000 while the total endowment of all the private institutions in 1918 was only \$435,000,000.⁴⁷ Many millions more were added in 1919 and the early part of 1920, but it would be a most liberal allowance if we were to estimate \$500,000,000 as the total endowment of private colleges by the beginning of 1921. This would leave \$700,000,000 as the necessary amount to be added to the endowments of the private institutions, if they are to be enabled permanently to perform their proper functions.

Here again it is only wise to set a ten-year period for securing this amount, and this would mean an annual contribution to the permanent endowments of the colleges of at least \$70,000,000.

It would also be necessary, however, to make contributions to meet the current expenses of the colleges during the time that the endowment was insufficient. Thus, since at least \$60,000,000 is needed annually and the income from the endowment during the first year of this ten-year period would net only \$28,500,000, there would be left \$31,500,000 to be met from current gifts. This amount would decrease annually as the amount of the endowment increased. During the next year, our private colleges and universities, therefore, would need at least \$100,000,000 in donations.

2. *Private Secondary Schools.*

The United States Bureau of Education states that during the academic year 1917-18, \$1,748,000 was given by individuals to 186 private schools.⁴⁸ Taking into account the decreased purchasing power of the dollar and the hundreds of worthy schools that are on the most precarious of financial footings, an estimate of \$5,000,000 as a necessary minimum is not disproportionate.

3. *Negro Education.*

The negroes, particularly in the South, do not receive anywhere near equal educational opportunities as compared with the whites. Jones's classic study on *Negro Education* shows that in 1916 the southern states expended \$10.32 on teachers' salaries for each white child between six and fourteen,

⁴⁵ In 1917-18, approximately 4 per cent of the total income was received from this source. *United States Bureau of Education, Bulletin 87, op. cit.*, p. 23.

⁴⁶ S. P. Capen, *A Survey of Higher Education, 1916-18, United States Bureau of Education, Bulletin 22, 1919, p. 6.*

⁴⁷ Compiled from data given in *United States Bureau of Education, Bulletin No. 87, 1919, op. cit.*, pp. 27-28.

⁴⁸ *United States Bureau of Education, Bulletin No. 3, 1920; "Private High Schools and Academies," p. 59.*

while they expended only \$2.89 for each colored child of the same age period.⁴⁹ In other words the colored child received only 28 per cent of the expenditure given the white.

Even including the \$3,000,000 given to private negro schools, the total amount available for negro education is only about half as much per capita as for white education.⁵⁰ It is idle to say that this deficit should be made good by the legislatures of the southern states. These states have, on the whole, shown so little inclination to better the educational opportunities of the negro that it has been found necessary to supplement their appropriations by private donations. Hitherto most benefactions have of course taken the form of the establishment of additional private schools, but an even more promising method in recent years has been the development of private aid to the public schools as worked out by the Jeannes, Phelps-Stokes, and Rosenwald Funds. Under the Rosenwald plan, the private donation is conditioned upon the appropriation of additional sums by the state or local authorities, thus preventing the localities assisted from being pauperized and stimulating them as well to bear their own burden.

We may divide the donations needed into two classes:—(1) Donations for public education. A subsidy of at least \$6 for each of the approximately 2,000,000 negro children between the ages of six and fourteen is essential if anything like equality of educational opportunity is to be secured. This is based on the increased cost of instruction since 1916 and would require more than a \$6 salary appropriation per child from the school authorities. This subsidy would total \$12,000,000. (2) Donations for private education. As has been stated, approximately \$3,000,000 was contributed in 1916 to private schools for the negroes. These were mostly of secondary grade. Jones's painstaking study shows that while there are many fraudulent schools that should be exposed or abolished, many are doing excellent work under very great difficulties. The schools already in existence should be strengthened appreciably before any new schools are added. In view of these needs and the diminished purchasing power of the dollar, contributions of not less than \$12,000,000 are needed annually to give training in such practical matters as agriculture, the manual trades, home-making and sanitation, as well as the education of the teachers, doctors, dentists, etc., that are needed by the race.

4. Scholarships for Needy Children.

Within recent years several groups, notably the Henry Street Settlement in New York City and the White-Williams Foundation of Philadelphia, have recognized the great economic and social loss resulting from hundreds of thousands of children leaving school at the minimum age because of economic need. The organizations mentioned have given scholarships to the families of especially gifted children to make it possible for them to continue in school. These scholarships are considerably less than what the child would be able to earn, so that sacrifice on the part of the family is required to help keep the child in school. The assistance, however, does make possible further training which otherwise would be impossible. Schol-

⁴⁹ Thomas Jesse Jones, *Negro Education; United States Bureau of Education, Bulletins 38 and 39, 1916*. See especially *Bulletin 39*, p. 12.

⁵⁰ Jones, *op. cit.*; *Bulletin 39*, p. 12.

arships costing on the average \$200 annually for 75,000 school children, or less than 10 per cent of those who now drop out of school each year at the age of fourteen, would amount to \$15,000,000.

5. *Experimental Schools.*

Public schools can in their very nature do little experimental work, hence various private schools of an experimental nature have been endowed in various cities of the country. Results there developed have been taken over in many instances by the public schools.⁵¹ A minimum of one such school for every state would cost at least \$1,000,000 annually.

VI. *The Fine Arts.* \$20,000,000.

Philanthropic giving very frequently takes the form of developing the arts and making their enjoyment possible for the people at large. Large sums are now given annually to support art galleries, the many symphony orchestras, public concerts, schools of musical education, and museums of various kinds. Thus in Chicago subscriptions of from \$500,000 to \$1,000,000 are needed annually to support the Grand Opera Company alone. The sums now given for all these purposes today certainly amount to more than \$10,000,000 and may run as high as \$20,000,000. To set the latter figure as the amount that should be given is a most moderate estimate.

VII. *Miscellaneous Reform Organizations.* \$10,000,000.

There are many hundreds of such organizations and several score of well-known national bodies, that are receiving wide support today. The work of such bodies as the American Association for Labor Legislation, the Proportional Representation League, the National Child Labor Committee, the Consumers' League, the Foreign Policies Association, Community Service, the National Tuberculosis Association and others, is invaluable in the contributions which they have already made to public thinking. To this should be added the support of such publications as *The Survey*, *The Family*, and other periodicals. From partial statistics that have been gathered, it seems clear that at least several millions are now being spent for such groups to do pioneering on the frontier of social purpose. The sum of \$10,000,000 annually for this general purpose would be a low minimum.

VIII. *Direct Personal Gifts to Individuals.* \$200,000,000.

In the preceding sections we have listed only such contributions as are made through formal organizations and have omitted the more common form of personal charity,—namely, direct giving from donor to recipient. Such charity includes direct gifts of money, clothing, and food, together with those personal loans which are really gifts. The United States Bureau of Labor in its investigation into family expenditures in 1901 found that in approximately 2,600 families, about three tenths of one per cent of the average income was spent for charity.⁵² The amounts thus spent were about

⁵¹ The Gary schools, for instance, are copied upon the principles worked out by Professor John Dewey in the famous "Dewey School" in Chicago.

⁵² *Eighteenth Annual Report, United States Commission of Labor, 1903, Cost of Living and Retail Prices of Food*, pp. 500-01, 508-09, 366-67.

three-tenths as much as was contributed for religious purposes. It is probably correct to assume that practically all of this consisted of direct gifts to those in need. The study made by the Philadelphia Bureau of Municipal Research in the fall of 1918 of 260 families showed that they spent approximately one-half of one per cent of their income for gifts of "friendship" outside of the family, and for gifts of charity.⁵³ Probably both of these items should be counted as charitable contributions.

It seems fairly safe, therefore, to set the personal gifts of the lower paid workers at somewhere around three-tenths of one per cent of their income.

No one can estimate the amounts given directly by those of the higher income groups. It is probably, however, not doing violence to the facts if we estimate an equal proportional contribution. Upon this assumption, of direct contributions of three-tenths of one per cent of the national personal income of fifty-five billions, the total amounts so contributed would be approximately 165,000,000. This may or may not be more than is now given. It is interesting to note, however, in this connection that Dr. E. T. Devine some years ago estimated that the amount of such direct contributions probably outweighed the relief distributed through organizations or institutions.⁵⁴

Whatever may be the facts of present direct contributions, few, probably, will deny that at least \$200,000,000 should be given. In the face of such great need, is it not most conservative to set this as the minimum figure?

IX. Foreign Relief. \$166,000,000.

East of the Rhine, the war has impoverished whole populations, so that the very lives of millions of women and children are threatened.⁵⁵ While it is only proper that the wealthy in the various countries should bear a large portion of the burden, the need is so staggering and the total national resources of many of the countries so scanty that America, whose wealth is so much greater than that of any other country, should assist in carrying the load. Furthermore, the failure of a large section of the rich in the distressed countries to do their duty, does not free us from the obligation of doing ours. Finally, the question as to whether relief to the population would assist governments of which we disapprove may well be brushed aside in view of the intense suffering of flesh and blood persons. Human need is the great reality, and human response to that need the surest way of cementing friendship and good will between peoples and nations.

Nevertheless, in view of the distance of the suffering and the difficulty of appeal, we have thought it best to limit the quota of American gifts to a point in general just sufficient, when joined with the charitable relief from other countries, to meet the primary needs of food, clothing, shelter, and some medical attention.

⁵³ Beyer, Davis and Thwing, *Workingman's Standard of Living in Philadelphia*, p. 85.

⁵⁴ Devine, *The Principles of Relief*, p. 332.

⁵⁵ For a reliable description of conditions during the early part of 1920, see Henry P. Davison's address reported in *The Survey*, April 24, 1920, pp. 137-138. Julia C. Lathrop, *The Children of Central Europe, Mother and Child*, October 1920, (Vol. No. 3) pp. 99-107. The press releases of the American Friends' Service Committee, 20 South 12th St., Philadelphia, give a sober yet convincing picture of the conditions during both 1920 and 1921.

1. *Armenia and Near Eastern Relief.*

Armenia is destitute and decimated. Although over \$50,000,000 of relief has been distributed in the Near East since the Armistice, the situation today, as a result of the continued fighting, is desperate. Hundreds of thousands of children and adults are literally starving to death, and while the Near East Relief, due to the difficulty of raising funds, can only plan an expenditure of \$15,000,000 during the coming year, several times this sum is urgently needed.⁵⁶ An estimate of \$35,000,000 as the basic minimum which should have been spent during 1921 is most conservative.

2. *Austria.*

The dismemberment of the Austro-Hungarian Empire destroyed an almost self-sufficing economic union. As is well known, the various liberated peoples are refusing to trade with Vienna, and in consequence the population of that unhappy city would be slowly starving to death were it not for outside aid. In 1920, 100,000 schoolchildren alone were underfed and diseased, while the younger children were suffering still more. Thousands died weekly. English and American Friends (Quakers), forming only one of the relief organizations, planned to distribute relief at the rate of \$4,500,000 a year. To this should be added the larger sums contributed by such organizations as the American Red Cross, the European Children's Fund, and other bodies. At least \$20,000,000 was needed to tide this population over properly during 1921.

3. *Poland.*

In April, 1920, there were 250,000 cases of typhus in Poland, while in some districts there was but one doctor to every 150,000 people. A large part of the population was also starving. The situation became much worse as a result of the Russo-Polish war, but by the middle of 1921 conditions had begun to improve. Relief was distributed during 1920-21 by a number of agencies including the Red Cross, the Quakers, the European Children's Fund, Jewish War Relief, etc. Not less than \$15,000,000 was needed during 1921 to carry on the proper relief work and health measures.

4. *Germany.*

The work of the American and English Friends showed that in 1920 approximately 30 per cent of the 15,000,000 German children were undernourished, and that over 1,000,000 were badly and dangerously undernourished.⁵⁷ Millions were suffering from the consequent child diseases.

⁵⁶ For the need of relief work and for a statement of what has been done, see the *Report of the Near East Relief to Congress* for this year 1920.

⁵⁷ The Quakers divided the child population of Germany into four classes, with the following numbers in each:

Class	Description	No. of Children
1.	Normally nourished	10,500,000
2.	Under nourished	3,500,000
3.	Badly undernourished	1,000,000
4.	Dangerously undernourished	
Total		15,000,000

The American Friends' Service Committee estimated that outside contributions of at least \$1,000,000 a month, or \$12,000,000 a year, were necessary during the year 1920-21, to give the supplementary feedings to these children alone. Sufficient funds to feed approximately 750,000 children were secured and supervised daily meals were given to that number. By the fall of 1921, the need had abated and less than half that sum was needed. A moderate amount for all necessary relief in that country during 1921 would therefore have been \$10,000,000.

5. The Baltic States.

The newly created states of Latvia, Finland, Esthonia, and Lithuania have also been suffering from typhus and starvation. At least \$4,000,000 is needed for relief in these countries.

6. Russia.

There is great distress in Russia. For our purpose it is idle to go back to its original causes in the seven years of warfare, the blockade, the crop failures, or the Bolshevik government. The reality is terrible enough, and it is now happily remediable through our own American Relief Administration which is to have full charge of the distribution of all of its funds.

The present sources of distress are twofold:

a) The continued shortage of the primary means of subsistence, especially food, in the large cities, beginning with Moscow and Petrograd. Early in 1921 Miss Anna Haines of the American Friends' Service Committee reported that the infant death rate in Moscow was 40 per cent and that in that city alone at least 38,000 children were on the verge of actual starvation.

b) The recent famine in the Volga area. This, according to the most recent estimates, is affecting approximately thirty million persons; and although transportation in that region is difficult, a fairly complete salvaging of the population should not prove impossible if help is prompt. Dr. Nansen has estimated the need at approximately \$150,000,000. For America to contribute only \$40,000,000 of this would certainly be most moderate.

7. Italy.

While the suffering since the Armistice has been greatest in the defeated or blockaded countries, the peoples in the nominally victorious nations have also undergone great privation. The suffering in Italy has been especially acute. Tens of thousands of children have been slowly starving, and outside relief has been greatly needed. Much money has of course been sent back to Italy by Italian Americans and various societies have also distributed a great deal of relief. It seems probable that at least \$7,000,000 is needed to meet the general needs.

8. The Balkans.

The Balkan countries, particularly Serbia, are suffering severely. Serbia lost approximately a third of her population during the war, and most of the remainder are diseased and impoverished. Large sections of Rumania, particularly the Drobrudja, were, even by the end of 1920, almost destitute. Parts of Macedonia, Greece, and Bulgaria were also greatly in need of as-

sistance. Not less than \$10,000,000 would probably have been sufficient to cope with the situation.

9. *China.*

The series of crop failures in Northern China resulted in the terrible famine of 1920-21. As a result, over thirty millions of people were starving. It was at first thought that at least \$200,000,000 was needed to save them. It finally developed, however, that as a result of the very severe rationing adopted, probably \$50,000,000, if it could have been secured and efficiently distributed, would at least have kept them alive. China, herself, poor as she is, raised \$7,500,000 for relief and generous sums were given in other countries. If all the sufferers were to have been saved, however, the United States should have raised approximately \$35,000,000, instead of less than one-quarter of this sum as she did. Due to the difficulties of distribution, however, it is doubtful whether more than \$20,000,000 could have been expended efficiently, and we accept this grossly inadequate sum as America's minimum contribution.

10. *Ireland.*

There has been a great deal of physical suffering and distress caused in Ireland by the strife between the opposing political parties. The American Commission for Relief in Ireland has called for a subscription of \$10,400,000 for relief work. It is probable that this is something of an overestimate, although the White Cross, a non-partisan organization through which the relief is being distributed, has testified to the existence of great need. The White Cross has also guaranteed that no discrimination shall be shown in the distribution of the relief.

It is probably safe, however, to place our estimate of \$5,000,000 as the basic amount needed.

The above sums, totalling \$166,000,000 for foreign relief are but a modest increase over the extremely inadequate sums already contributed in this country for foreign relief. Thus the European Children's Fund received \$35,000,000 in the winter of 1920-21, the American Red Cross planned to spend \$15,000,000, the Near East Relief expended approximately \$10,000,000, nearly \$8,000,000 was raised for China relief, while to this should be added the independent contributions to such bodies as the American Friends' Service Committee, the Jewish War Relief Agencies, and other organizations. Moreover, added to this were the personal contributions sent direct to the needy by those resident in the United States.

DEDUCTION FOR EXISTING ENDOWMENTS

For many of the objects listed, such as for example higher education, hospital maintenance and medical research, we have found it possible to segregate the amounts needed from the present endowments. In these cases, the estimated amounts are not the gross but the net additional sums that must be raised. This, however, has not been possible in all cases, notably in connection with institutions for children and for the aged.

In 1910, the United States Census Bureau, in its study of benevolent institutions, secured data from 1,646 such institutions, covering the amounts of their invested funds which are shown below.⁵⁸

⁵⁸ *United States Census Report on Benevolent Institutions*, 1910, p. 78.

Type of Institution	Number of Institutions Reporting	Invested Funds
1. Care of Children	409	\$42,000,000
2. Societies for Children	53	3,000,000
3. Homes for Adults	586	46,000,000
4. Hospitals and Sanitariums.	519	74,000,000
5. Dispensaries	44	2,000,000
6. Blind and Deaf.....	35	7,000,000
Total	1646	\$174,000,000

While only about a third of the total number of institutions reported their endowments, it is probable that they possessed a large majority of all endowments, since those who did not report were apparently the smaller and weaker institutions. Since 1910, of course, the endowments of charitable organizations have in general greatly increased. It is extremely doubtful, however, whether outside of colleges and universities they exceed \$600,000,000. This amount at 5 per cent would give an annual income of \$30,000,000 which should be deducted from the gross amount needed for philanthropic purposes.

Comparison of Minimum Amount Recommended for Philanthropic Giving, with Sums Spent for Other Purposes.

The \$1,719,000,000 set as the minimum amount to be contributed to philanthropic purposes seems modest enough when compared with the following sums which the American people spent in 1920, according to the estimates of the United States Treasury Department, as cited by Ex-Commissioner of Education Claxton.⁵⁹

Face Powder, Cosmetics, Perfume, etc.....	\$750,000,000
Furs	300,000,000
Soft Drinks	350,000,000
Cigarettes	800,000,000
Cigars	510,000,000
Tobacco and Snuff	800,000,000
Jewelry	500,000,000
Chewing Gum	50,000,000
Ice Cream	250,000,000
Total	\$4,310,000,000

A nation that can spend four and one third billions of dollars upon such objects as these can certainly well afford to spend less than 40 per cent of this sum for charitable and religious purposes.

⁵⁹ *School Life*, April 1, 1921, p. 2. Presumably information on these matters was collected through the medium of the luxury taxes.

CHAPTER III

THE NEEDS OF THE COUNTRY FOR FRESH CAPITAL INVESTMENT

Save in periods of great distress, the amounts given for philanthropic purposes should not infringe unduly upon the annual savings of fresh capital that are needed reasonably to increase the effectiveness of industry. It accordingly is necessary to determine the amount of such fresh capital as is needed by the country as a whole.

In dealing with this question, it will be helpful to realize that capital savings are of two kinds: those made outside the price system and those made within it. The most common form of the first type of savings occurs in farming. The farmer, who with his own labor or that of his family clears the land, builds fences, barns, and a dwelling, is forming capital. He is forming it, however, not by saving money, but by applying labor, unpaid in money, directly to create commodities which will last and which will enable him or his descendants to enjoy life more fully in the future, if not in the present.¹ In such a simple way, in the main, was the American wilderness and prairie conquered by the frontiersmen and early settlers and the capital equipment of American agriculture largely built up.

This method of capital formation, which is necessarily predominant in a society where there is little division of labor, must largely give way in a society of high specialization where the necessary services of others are commanded only by the payment of money. It is still, however, probably the chief way in which fresh capital is formed in agriculture, as well as in the raising of live-stock, and exists in many other forms of enterprise as well. Since, however, we are in this study necessarily dealing in terms of dollars, and are excluding from our national income itself those items for which a money price is not paid, we cannot include these savings in our estimate of the necessary amounts of money which should be saved. We should, however, realize that there is a large amount of capital that will not be shown in the monetary figures and that in reality the total capital formed will greatly exceed the estimates.

We are dealing, therefore, in this essay only with the second type of savings, namely, those made within the price system whereby the surplus income of private individuals in dollars is loaned, in return for the payment of interest, to enterprises where it serves to purchase the necessary goods and services to build up the capital of those activities.

¹ For a clear explanation of this type of capital formation, see H. G. Moulton, "Commercial Banking and Capital Formation," *Journal of Political Economy*, November, 1918, pp. 851-52. Knut Hamsun's novel, *Growth of the Soil*, describes this process graphically.

Emphasis should be placed upon the word *loaned*: money taken by the government in the form of taxes and invested in post-office buildings, irrigation projects, etc., is indeed used to create capital, but it is taken by a forced levy, not by voluntary investment and is therefore excluded. When the government seeks a voluntary loan from individuals, as in the issuance of bonds for the Panama Canal, for a city water works, or a highway, the amount of capital so invested would, however, come within the scope of this essay.

One further distinction should be made. We are here considering only the net additions to the existing capital equipment of the country; hence we should not include in this amount the sums needed for the maintenance of the existing equipment or as a depreciation fund. In correct accounting, these items are carefully distinguished, the annual receipts of any enterprise being supposed to meet the necessary charges for maintenance and depreciation, which are designed merely to maintain the existing property intact. Fresh capital investment, on the other hand, does not merely maintain, but adds to the physical stock of capital goods. We are justified in considering only these fresh investments, since the total figures for the national income which we will later use and from which the capital investments must be made, is *net income*, from which deductions have already been made for maintenance, depreciation, and obsolescence. To provide for these items from this net national income, therefore, would be to make a double provision for them.²

Two sets of factors have been used in determining the amounts of capital which should be saved annually in this country: (a) the rate of capital growth in the past, and (b) the present capital needs of the various industries as estimated by experts. In some cases this will mean an increase over past savings, in others a decrease. In making these estimates, moreover, we have considered not whether it would be profitable for such an amount of capital to be saved and invested, but whether the country needs the added amount of physically productive capital. That the two viewpoints may vary will be seen from the fact that in periods of business depression, such as we are experiencing in 1921, it is not profitable to expand appreciably the country's capital equipment. From the long-run social viewpoint, however, it is vitally important that each year or period of years should witness a steady growth in the physical efficiency of the capital plant of the country. Our estimate of the amount of capital that *should be* saved in 1921, therefore, is undoubtedly much in excess of what actually will be saved in this

² Many of the estimates of the amounts of capital annually invested have included sums really designed for maintenance, depreciation, and obsolescence, and hence have unduly swollen the total estimates of invested capital.

year; it is probably somewhat below the amount that was actually saved during the extremely prosperous years of 1916 and 1917. We believe, however, that the amount estimated would furnish an adequate average annual rate of capital growth over a period of years, and that it, as well as the estimated sums needed for philanthropic purposes, may be used as a basis at least in making estimates for a number of years to come.

Finally, it should be made clear that we are not relying in any degree for these savings upon the "painless capital" created by banks in the form of bank loans. We are depending solely upon the saved income of individuals and corporations who lay by for the future, rather than spend for the present. To the extent then that bank loans stimulate enterprise and capital formation that would not otherwise occur, and do not constitute merely more monetary counters for the same supply of goods, our estimates of the amount of capital that should be saved would be increased.

Following the principles which have been outlined, and using the two standards respectively of past average capital savings and specific estimated present capital needs, we have arrived at the following estimates of the amounts of fresh capital investment needed annually in this country, which amounts to approximately \$6,000,000,000.

TABLE 2.—ESTIMATED CAPITAL NEEDS OF THE UNITED STATES
(In terms of March, 1921, prices)

Object	Amount (in millions of dollars)
1. Improvements in Agricultural Land.....	600
2. Buildings	2,300
3. Live Stock	150
4. Farm Implements and Machinery	175
5. Manufacturing Machinery	650
6. Railroads	750
7. Public Utilities	900
8. Highways	150
9. Foreign Investments	500
Total	\$6,175

The statistical data upon which these estimates are made will be found in the notes to this chapter where they may be studied by those especially interested. The more casual reader, however, will probably prefer to turn directly to the next chapter where the thread of the argument is continued.

NOTES TO CHAPTER III

I. DATA ON THE PAST RATE OF CAPITAL GROWTH

1. *The Study of the Census Bureau on the Increase of Wealth in the United States.*

The two volume report of the Census Bureau on Wealth, Debt and Taxation, which was published in 1913, gives very full estimates of our wealth in 1912 as compared with previous periods. The following table shows the money value of the various classes of capital goods for the years 1904 and 1912, together with the total increase and the average annual increase between those dates. This table does not include such items as (1) the annual production during the respective years, since this would constitute income rather than capital; (2) articles partaking more of the nature of consumers' goods, such as clothing, jewelry, carriages, automobiles, etc., although buildings are included; (3) gold and silver, whether in coin or bullion.

TABLE 3.—INCREASE IN MONEY VALUE OF CAPITAL GOODS AND LAND IN THE UNITED STATES 1904-12. (REPORT U. S. CENSUS BUREAU ON WEALTH, DEBT, AND TAXATION, VOL. 1, P. 21)

Form of Wealth	Amount in Billions of Dollars			
	1904	1912	Increase 1904-1912	Average Annual Increase
Real Property and Improvements	62.3	110.7	48.4	6.0
Live Stock	4.1	6.2	2.1	.3
Farm Implements and Machinery .....	.8	1.4	.6	.1
Manufacturing Machinery	3.3	6.1	2.8	.4
Railways and Equipment	11.2	16.1	4.9	.6
Public Utilities*	5.4	10.3	4.9	.6
Total	87.1	150.8	63.7	8.0

* Including street railways, telegraph and telephone systems, private water works and electric stations and irrigation systems.

This table shows, therefore, a total increase in the money value of capital goods and land during these eight years of approximately \$64,000,000,000, or an average annual rate of capital growth of \$8,000,000,000.

There are, however, at least two very serious defects in this method of measurement which make it a gross overstatement of the amount of capital actually saved. First, it includes the increased money value of land and other items caused by increasing scarcity and a consequent increased money rent, and, secondly, it represents in part the mere increase in the general price level. Each of these may be briefly explained in turn.

As is well known, an increase in the population puts an increased pressure upon the land both for dwellings and for food. Poorer land must be resorted to and the better land more intensively used. The result is an increased cost of production on the land newly used over the previous cost, and this in turn necessitates a higher price to the consumer. This higher price, moreover, means for the lands previously used a greater differential between cost and price, and hence an increased money rent. This increased

rental, together with prospective increases, is in turn capitalized into an increased total value. Thus probably the largest part of the extraordinary increase in land values from 1900 to 1910, which amounted to 118 per cent, was due to this "unearned increment" rather than to actual improvements in or on the soil, and a large percentage of the 48 billions of capital increase from 1904 to 1912 in land and buildings shown by Table 3 is a fictitious capital growth. While this unearned increment inheres chiefly to land, it exists also in other branches of property, notably in the railroads and in certain other forms of business. In the second place, since the estimates of wealth were made in terms of money, and since the price level was appreciably higher in 1912 than in 1904, there was a general marking up of the existing 1904 stock of capital goods which did not represent an actual increase in the stock of capital goods.

Fortunately there are methods whereby the error caused by these defects of monetary valuation as an index of national wealth may be minimized and a more accurate estimate of the actual increase in capital obtained. The influence of the unearned increment on increased land values may be largely eliminated (a) by separating the value of buildings from that of the land; (b) by determining the proportion which improvements caused of increased land values. The 1913 report of the Census Bureau on Wealth, Debt, and Taxation did not differentiate between land and buildings, but lumped them both together as Real Property, but the census of 1900 and 1910 did separate them for agriculture. In 1900, buildings represented 22 per cent, and in 1910 18 per cent of the total of combined value.¹ For other than agricultural property, the relationship between the value of the buildings and that of the land naturally varies. It seems safe to assume, however, that it did not vary so greatly as to raise the percentage which buildings formed of the total above 30 per cent in 1904 and 25 per cent in 1912. Using this as a basis, building values would have amounted to approximately \$18,000,000 000 in 1904 and \$27,700,000,000 in 1912.

The determination of the amount of the increase in land values caused by improvements as distinguished from the unearned increment is a more difficult affair. Professor David Friday, after a study of the real estate assessments of twenty-four states which separate improvements on real estate from land values, estimates that improvements form approximately 40 per cent of land values.² Using this estimate, which, although probably high, is the best that has been made, we should have \$17,400,000,000 as the total value of the improvements in real estate in 1904 and \$33,200,000,000 as the value in 1912. While the unearned increment as regards real estate is largely isolated by this method, the unearned increment attaching to railroads, public utilities, and other lines of activity cannot be segregated with the available statistics.

We are able to compensate for the error caused by the shrinkage in the measuring rod of money during this period by raising the money value of our capital wealth in 1904 to the figure which it would have amounted to at the 1912 scale of prices. We can make this adjustment by using the very excellent series of wholesale price index numbers compiled by the United States Bureau of Labor Statistics. If the average prices for the period

¹ *Thirteenth Census*, Vol. V, p. 42.

² David Friday, *Profits, Wages, and Prices*, p. 82.

1890-99 are taken as the base or 100, this series shows an index number for all commodities of 113 in 1904 and 133.6 in 1912—an increase of 20.6 points and 18.2 per cent. For the group of farm products, the increase was from 126.2 to 171.3, or a rise of 35.1 points and 27.9 per cent. For the metals and implements group, the ascent was from 109.6 to 126.1, or an increase of 16.5 points and 15.0 per cent. For lumber and building materials, the rise was from 122.7 to 148.2 or an increase of 25.5 points and 20.0 per cent.³

In raising the 1904 price level to that of 1912, we may apply the increase in lumber and building materials to the valuation of buildings, the rise in farm products to that of live stock, the increase in metals and implements to the valuations of both farm implements and manufacturing machinery, while the general index number for all commodities may be used in the appraisalment of railroads, public utilities, and improvements in real estate.

By using these methods of correction we have the following table which gives a more accurate picture of the increase in capital goods during these eight years.

TABLE 4.—INCREASE IN CAPITAL GOODS, 1904-12, IN TERMS OF 1912 PRICE LEVEL

Form of Wealth	Valuation in Billions of Dollars			
	1904 (in terms of 1912 price level)	1912	Increase 1904-1912	Average Annual Increase
Improvements in Real Estate	20.6	33.2	12.6	1.58
Buildings	22.4	27.7	5.3	.66
Live Stock	5.2	6.2	1.0	.13
Farm Implements and Machinery .....	.9	1.4	.5	.06
Manufacturing Machinery	3.8	6.1	2.3	.29
Railroads and Equipment	13.2	16.1	2.9	.37
Public Utilities	6.4	10.3	3.9	.49
Total	72.5	101.0	28.5	3.58

While this table shows an approximate annual increase in capital of 3.6 billions, it should be borne in mind that not all the unearned increment has been eliminated and that a large part of the capital increases were made outside the price system. This latter point is especially applicable to the increases due to improvements in or on the land. The use of surplus and unpaid labor time on such improvements as clearing, draining, fencing, orchard planting, etc., indeed probably accounted for the major part of the approximate 12.6 billions of increase in real estate improvements. The actual average annual amount of capital saved through the price system, therefore, was much less than the indicated rate of capital growth.

In order to determine how much capital would have to be saved in 1921 to correspond to the indicated rate of growth for the eight years studied, allowance should be made for the following two factors: (1) the increase

³ *Bulletin 173, United States Bureau of Labor Statistics, Index. Numbers of Wholesale Prices in the United States and Foreign Countries, p. 126.*

in the price from 1912 to 1921; (2) the increase in the population from the period 1904-1912 to 1921. Now from 1912 to March, 1921, wholesale prices of farm products rose 25 per cent, metals 40 per cent, lumber and building materials 108 per cent, and all commodities 59 per cent.⁴ Applying these increases in the price level to the average capital increases shown in Table 4, we have the following rate of capital growth at the March, 1921, price level.

TABLE 5.—ANNUAL RATE OF CAPITAL GROWTH, 1904-12, IN TERMS OF MARCH, 1921, PRICE LEVEL

Form of Wealth	Valuation in Billions of Dollars		
	Average Annual Increase in terms of 1912 price level	Increase of March, 1921, prices over 1912 prices	Average Annual Increase in terms of March, 1921, price level
Improvements in Real Estate	1.6	59	2.54
Buildings .....	.66	108	1.37
Live Stock .....	.13	25	.16
Farm Implements and Machinery .....	.06	40	.08
Manufacturing Machinery .....	.29	40	.41
Railroads and Equipment .....	.37	59	.59
Public Utilities .....	.49	59	.78
Total	3.58		5.93

The value of the average annual increase in capital for the eight years from 1904 to 1912 would have amounted to approximately \$6,000,000,000 at the March, 1921, scale of prices.

This increase, however, was made with a considerably smaller population than that of the country in 1921, and if an equal *per capita* amount were to be saved now as then, the total amount would have to be increased in the proportion that the population itself has increased. It seems fair to assume that the population increased from 1910 to 1912 at approximately the same rate as from 1900 to 1912, since the drop in the rate of population growth did not probably occur until after the shutting off of immigration by the War. The population in the year 1908 would, therefore, probably represent the average for the eight year period 1904-12. Applying the common methods of computing the population in inter-censal periods, we have a probable population of 88.7 millions in 1908 and of 107.0 millions in 1921.⁵ There was, therefore, a probable increase of 19.3 millions or 22 per cent in these thirteen years. Applying this increase to the 1904-12 savings on the March, 1921, price level, as indicated in table 5, we should have the sum of approximately \$7,250,000,000 worth of capital as the amount that would have to be saved, if we were to maintain an equal *per capita* rate of saving.

This sum, however, still includes some of the unearned increment and

⁴ Compiled from data in *Bulletin 226 of the United States Bureau of Labor Statistics*, pp. 12-13, and the *Monthly Labor Review*, June, 1921, p. 38.

⁵ The population of the United States in 1900 was 75.99 millions, in 1910 91.97 millions, in 1920, 105.68 millions.

it includes a very large amount of the savings made outside of the price system, which have already been described. It is probable, therefore, that not more than five or six billions of dollars would now have to be raised through the price system to equal the rate of capital growth during this period.

2. The Estimate of Professor H. G. Hayes as to the Rate of Capital Growth.

A unique study was made by Professor H. G. Hayes in 1918 and published in the *Journal of Political Economy* for November of that year⁶ as to the amount of economic energy in the United States normally devoted to the repair and replacement of capital goods. This inquiry differs from others principally in that its estimates are made in terms of the proportion of the gainfully employed engaged in the creation and repair of capital goods rather than in the amount of money expended for these purposes. After a study of the census returns for 1914, Professor Hayes computed that only 1,727,000 wage earners, or 4¼ per cent of the total industrial population, were normally devoted to the construction and repair of factory buildings and equipment, railway rolling stock and equipment, and agricultural implements.⁷ If those engaged in all other branches of building and in highway construction were to be added, the total would not be increased by more than 2,000,000 or an addition of approximately 5 per cent.

While these statistics do not include those engaged in producing the raw material upon which the construction of these capital goods is based, they do include the energy of the workmen devoted to repairing the existing stock of capital goods. While it is difficult to balance these opposing considerations, it seems probable from Professor Hayes's study that not over 10 per cent (and possibly considerably less) of the national energy is devoted to the production of fresh capital goods. Translating this into terms of the national income, it would mean that if the rate of capital formation of 1914 were to be maintained in 1921, not over \$6,000,000,000 at the outside would have to be saved for this purpose and that quite probably somewhat less would do. This estimate made from a separate source and on a different basis, coincides with the conclusion drawn from an examination of the census study that between \$5,000,000,000 and \$6,000,000,000 would have to be saved in 1921 to correspond to the per capita rate of capital growth of 1904-12.

3. The Estimate of Professor David Friday of the War Time Increases in Capital.

The most daring attempt to estimate the amount of capital saved in this country during the wartime period is that made by Professor David Friday in his fascinatingly written *Profits, Wages, and Prices*. Professor Friday believes that during the war period there was a tremendous increase in the amount of capital saved, which was caused by a great increase in production

⁶ H. G. Hayes, "Production After the War," *Journal of Political Economy*, Vol. 26, pp. 941-51.

⁷ Hayes, *op. cit.*, p. 950.

during these years. He says that "the capital accumulation for the years 1913 to 1919 may be conservatively put as follows:⁸

1913	6.5 billion dollars
1915	9.0 " "
1916	14.5 " "
1917	18.0 " "
1918	22.0 " "
1919	15.0 " "

Later evidence proves almost conclusively that this greatly overestimates the amount of capital actually saved. Professor Friday's estimate was largely based on the assumed giant increases in production during 1917 and 1918. A number of more recent studies by Day,⁹ Stewart, Snyder and King¹⁰ indicate that this assumed movement did not take place. These investigations, while differing slightly from each other, show that while there was a very real increase in production in 1916 over the previous year, it either slumped slightly in 1917 and 1918, or increased slightly, but that there was no great increase in any case. The very careful study made by the National Bureau of Economic Research of the amount of the national income fixes the total for the years 1913-19 inclusive at the following amounts, in terms both of the price level of each year and of 1913.^{10a}

Year	National Income. Billions of Dollars	Purchasing Power at 1913 Price Level. Billions of Dollars
1913	33.3	33.3
1914	32.5	32.3
1915	35.9	35.0
1916	45.5	40.1
1917	53.9	39.6
1918	61.7	38.4
1919	66.0	37.3

These statistics show that while the money value of the national income rose steadily in this period, by far the greatest part of it was due to the increase in the price level. Reduced to dollars of constant purchasing power, it is seen that while there was a great increase in the years 1915 and 1916, there was a steady recession during the years 1917, 1918, and 1919—and not the increase in the years of America's participation in the war, upon which Professor Friday relied. It is, moreover, on the face of it highly improbable that such an enormous sum as \$22,000,000,000, or over 35 per cent of the total national income, should have been saved in 1918.

Therefore, while it is undoubtedly true that there was a greater accumulation of capital in the years 1915, 1916, 1917, and 1918 (representing as they did the upward swing of the business cycle) than had occurred in the

⁸ David Friday, *Profits, Wages, and Prices*, p. 91.

⁹ E. E. Day, "Measurement of Variations in National Real Income," *Publications American Statistical Association*, March, 1921, pp. 552-60.

¹⁰ See the papers by these men in the *American Economic Review*, March, 1921, pp. 57-82.

^{10a} Published through the courtesy of the Bureau.

preceding years, it by no means attained the volume which Professor Friday believed.

Furthermore, it is not to be expected that the rate of capital accumulation which did actually characterize these years should continue in more normal times. This is true for two reasons: (1) the years in question were the years in which the business cycle was swinging rapidly upward and consequently capital was being formed at a rate which could not be expected permanently to continue¹¹—and which, under the present organization of industry would be extremely dangerous were it to do so; (2) the period was that of the war when the patriotic impulse combined with governmental pressure caused a great curtailment of consumption which cannot be expected to continue, and which in a great many instances should not continue, in the quieter periods of peace.

II. ESTIMATES AS TO THE PRESENT CAPITAL NEEDS OF THE COUNTRY

Since conditions do not change greatly over short periods of time, the data which have been presented concerning the past rate of capital growth throw a great deal of light upon the present capital needs of the country. In the estimates that are to follow, not only will these statistics be utilized, but in so far as is possible, material on the specific fields will be used as well, including specialized statistical studies together with the estimates of experts.

1. *Improvements in Real Estate.*

The indicated annual rate of growth from 1904 to 1912 for this class of capital was at the 1921 price level approximately \$2,500,000,000. If we increase this by 22 per cent to allow for the increase in population, we should have a sum slightly in excess of \$3,000,000,000. By far the major portion of this would be accumulated directly by invested labor rather than by invested money. A certain proportion, however, designed for such purposes as hiring labor, buying fertilizer, ¹² wire fencing, drainage pipe, etc., would have to be saved through the price system, and would hence enter into our calculations. It seems on the whole fairly safe to estimate that not far from one fifth of the total would have to be accumulated through the medium of money, and we accordingly set \$600,000,000 as the current amount needed.

2. *Buildings.*

To equal the average growth per inhabitant in building capital which occurred between the years 1904 and 1912 would require in 1921 the expenditure of approximately \$1,660,000,000. This includes all types of building, factory, mercantile, and residential. There are three qualifications, however, that should be made to the setting of this amount as a proper annual sum to continue the rate of growth. (1) It seems at least likely that there was some over-building during this period. This is indicated, for Massachusetts at least, by the report of the Massachusetts Special Com-

¹¹ Mitchell's masterly *Business Cycles* shows how the "boom" years are the periods of great capital growth.

¹² See an article by Grinnell Jones, "Nitrogen, Its Fixation, Its Uses in War and Peace," *Quarterly Journal of Economics*, May, 1920, pp. 391-432.

mission on the Necessaries of Life, which showed a great building boom for 1910-17 and an "over-supply" of houses in that period. It is not known whether this was country-wide but the evidence seems to indicate that this was at least somewhat characteristic in part elsewhere. (2) A substantial portion of the annual amount of building, which the Senate Committee on Reconstruction and Production places as high as 20 per cent,¹³ is devoted not to the creation of additional buildings, but to the replacement of losses caused by fire, depreciation, and obsolescence. Since we are making our estimates on the basis of fresh capital investments, these should not be included. (3) A small proportion of the value of building construction is secured through the direct and unpaid labor of the owner or his family, and hence does not enter into the price system or necessitate the raising of capital in the form of money.

Taking these points into consideration, it seems probable that an allowance of \$1,300,000,000 would be an ample amount properly to carry on the rate of growth in building capital.

There is, however, a second consideration which necessitates a great increase in the amount of capital needed, and that is that there is a very grave housing shortage which has accumulated during the last seven years and which must be removed as speedily as possible. The best as well as the most recent investigation of the extent of this building shortage is that made by Mr. A. G. Wheeler and published in the *Bankers Economic Service*. (Special Analysis, June 21 to July 12, 1921).¹⁴ Mr. Wheeler took as his base, the average value of the building permits in 286 cities from 1909 to 1913 with which he compared the total expenditures for building in the succeeding years. He found that the percentage by which the various years fell below that of the basic period was as follows.¹⁵

Year	Relative Volume Per Cent of Normal	Per Cent by Which Volume Fell below Normal
1914	84	16
1915	89	11
1916	97	3
1917	55	45
1918	27	73
1919	64	36
1920	42	58
Total		242

¹³ *Report of Select Committee on Reconstruction and Production*. U. S. Senate, 66th Cong., 3d Sess., Senate Report No. 829.

¹⁴ See an article by A. D. Welton, "The Building Complex," *Annals* (No. 186), Sept. 1921, pp. 128-35, where Mr. Wheeler's study is cited. For an estimate of the building shortage see also, *Report of the Select Committee on Reconstruction and Production*, U. S. Senate, (the so-called Calder Committee) 66th Congress, 3 Sess., Senate Report No. 829, especially pp. 8-9; Homer Hoyt, "The Housing Shortage and the Supply of Building Materials," *Annals*, May 1920, p. 69.

¹⁵ Welton, *op. cit.*, p. 130. In this computation the increase in population is allowed for.

It will be seen that there is therefore an arrearage in building equivalent to approximately two and one third years of the average construction between 1909 and 1913. This in terms of the average costs for that period would amount to approximately \$2,850,000, and using the March, 1921, price level for building materials as an index of existent costs would total approximately \$5,900,000,000.

How much of this deficit should be assumed annually? Here again, it is at least possible that the rate of building during the years 1909-13 was one which it is not necessary to equal. On the whole, however, it seems fair that it should be used as a basis and that since the deficit has been seven years in accumulating, it is not too much to expect that it should be removed in an equal length of time. In order to provide for a slightly more rapid recovery, we may set six years as the time in which the shortage should be made good. This would mean the expenditure in 1921 of approximately \$1,000,000,000 additional to make up for this arrearage. This added to the estimated amount needed to provide for the normal building increase would make a total of \$2,300,000,000.

3. *Live Stock.*

The average increase from 1904 to 1912 for this branch of capital as adjusted to the price level and the population of 1921 would total approximately \$187,000,000. Probably the greater part of this, however, takes place outside the price system by the more or less automatic increase of the domesticated animals. There are, however, some costs in connection with the development of blooded stock, etc., and it is highly desirable that there should be a decided increase both in the quality and quantity of our live-stock for the enhancement of our meat and milk supply. Not more than \$150,000,000, however, would be needed for this purpose.

4. *Farm Implements and Machinery.*

To maintain the 1904-12 per capita rate of increase for this type of capital would require the expenditure of only \$100,000,000 at the March, 1921, level of prices. There has been, however, a great increase in the use of farm machinery since 1912, of which the most sensational example is the tractor.¹⁶ A large part of this increase was caused by the prosperous years of the war and post-war period and cannot and perhaps should not be expected to continue. Part of it, however, should be permanent and it does not seem excessive to set \$175,000,000 as the amount to be added to this form of capital in 1921.

5. *Manufacturing Machinery.*

To equal the 1904-12 per capita rate of increase for this variety of capital would necessitate the expenditure of close on to half a billion dollars in 1921. Allowing for a 30 per cent increase above this scale would bring the total up to \$650,000,000.

¹⁶ In 1917, 96,000 tractors were sold in the United States. *Yearbook, Department of Agriculture*, 1919, p. 75

6. Railroads and Equipment.

The Census study, as revised in Table 5, shows that the average rate of increase in the capital value of the railroads from 1904 to 1912, on the March, 1921, price level, was approximately \$590,000,000. Making an allowance for the increased population would bring this amount to \$720,000,000. This, however, would include some unearned increment.

The Bureau of Railway Economics, in one of its studies, presents statistics to show that the property investment of the roads increased from 12.42 billions in 1906 to 17.69 billions in 1916, or an annual increase of \$527,000,000.¹⁷ The exact definition of "property investment" is not, however, given, and we cannot be sure that this was a *bona fide* investment of fresh capital. In the years of 1918 and 1919, under the governmental control of the railroads, the following amounts of capital expenditure in addition to maintenance costs (which were heavy) were made upon the roads.¹⁸

Form of Expenditure	Amount in Millions		
	1918	1919	Total
Roadway and Rails.....	294	247	541
Improvements to Existing Equipment	19	21	40
New Equipment (purchased by R. R.'s.)....	161	64	225
New Equipment (purchased by U. S.).....	118	239	357
Total	592	571	1,163,000

These two years, therefore, showed an average capital growth of approximately \$580,000,000. Whether a greater amount than this is needed at present is problematical. Writing in November, 1919, Mr. Julius H. Parmelee, the well-known railroad expert, estimated that the roads would need a continuing annual capital investment of from one half to three quarters of a billion dollars, and inclined towards the upper figure as the more accurate amount.¹⁹ An estimate of \$750,000,000 would be a fairly liberal allowance and, on the whole, seems to be the most accurate that can be made at present.

7. Public Utilities.

As shown by Table 5, it would require \$780,000,000 at the March, 1921, price level to equal the annual increase of capital value in public utilities. To allow for the increase in population would necessitate an addition of \$170,000,000 more, or a total of \$950,000,000. The increase for the years mentioned, however, was due in part to increased land values and in part to a capitalization of franchise privileges. These were, moreover, years of

¹⁷ *Statistics of Railways, 1906-1916. Bulletin No. 120 of the Bureau of Railway Economics* (1918), p. 14.

¹⁸ See *Report to the President of Director-General W. D. Hines for 14 months ending March, 1, 1920*, p. 33.

¹⁹ J. H. Parmelee, "The Financial Needs of the Railways," *Annals*, November, 1919, pp. 170-77.

great growth in the street railway systems which, due to the extension in the use of the automobile, probably will not be so much needed in the future, although a considerable development of rapid-transit is needed in the larger cities to offset the tendency towards the remaking of slums. It is also true that few new irrigation projects should be instituted for some time.²⁰

On the other hand is the desirability of developing electrical power as speedily as possible. Great savings would result if bituminous coal, instead of being shipped by rail, were burned at the mine mouth to generate electrical energy, which would be distributed through a coördinated system of power lines. There is also an opportunity properly to develop the hydro-electric resources of the Pacific slope. In addition to this, the housing program which should be instituted will call for a considerable extension of water, gas, sewage, telephone, and electrical service.

Writing in November, 1916, Dr. Delos F. Wilcox, one of the leading authorities on public utilities, estimated that the various utilities of the country would need approximately half a billion dollars annually.²¹ Since then, however, there has been a great decrease in the amount of betterments to such enterprises and a considerable deficit has been accumulated which the Senate Committee on Reconstruction and Production places as high as \$1,200,000.²² This, combined with the increase in the price level, would necessitate a considerable increase to Dr. Wilcox's estimate. An allowance of \$900,000,000 would probably be sufficient to meet the chief needs of the situation.

8. *Highways.*

With that part of the funds for highways which is met from taxes, we are not here concerned, but we are concerned with that portion raised by means of bonds. In 1917 approximately \$280,000,000 was expended upon the highways²³ and it is probable that this year between four and five hundred million dollars will be so expended by the national government through the form of federal aid and by state and local appropriations as well. Probably the larger proportion of this will be met from taxes, but it is safe to estimate that \$150,000,000 will have to be raised by bonds.

9. *Foreign Investments.*

The World War caused the United States to change from a debtor to a creditor nation. The net export of capital during this period was approximately \$11,000,000,000, while during the post-armistice years of 1919 and 1920 approximately \$1,600,000,000 more of capital was exported, the lat-

²⁰ See Teele, *Irrigation in the United States*, esp. pp. 217-40. Teele shows that the projects under the construction costs for 1905 to 1915 would not pay the capital cost but merely meet the interest. He says, "The great need of the West now is the utilization of the works already built, not more works," p. 222.

²¹ D. F. Wilcox, "The Future of Public Utility Investments," *Annals*, Nov. 1916, p. 227.

²² *Report of Select Committee on Reconstruction and Production*, op. cit., p. 37.

²³ A. P. Anderson, *\$280,000,000 put into Highways and Bridges by States in 1917. Public Roads*, July, 1918, p. 27.

ter amount being financed largely by the banks through short-time credits.²⁴ While such a tremendous rate of foreign investment cannot be expected to continue, particularly in view of the very serious financial situation of Europe, it is to be expected that there will be a considerable amount not only in Europe, but in the more economically undeveloped countries. While it is probable that this amount need not equal the huge foreign investments of the British prior to 1914, which according to C. K. Hobson amounted to approximately \$800,000,000 annually,²⁵ they should perhaps total somewhere around \$500,000,000, which we accept as our estimate.

²⁴ J. H. Williams, "Foreign Trade Balance of the United States," *Supplement to the American Economic Review*, March, 1921, pp. 22-39.

²⁵ C. K. Hobson, "British Overseas Investments: Their Growth and Importance," *Annals*, November, 1916, p. 28. See also his *Export of Capital*.

CHAPTER IV

AMERICAN STANDARDS OF LIVING AND GIVING: THEIR COST IN RELATION TO SIZE OF FAMILY

The two preceding chapters have dealt with the collective aspect of our problem—with the total amounts required for American charities and investments. We turn now to its distributive aspect, the allotment of the total burden among different classes of givers according to size of income and size of family.

Dividing the country as a whole into successive income groups (after the fashion of the Federal Income Tax Reports) we shall, in Chapter V, endeavor to allot successive charitable contributions to the members of these different groups on a per capita—or rather per “average” family—basis. In the present chapter we shall take the important preliminary step of describing some of these groups, and then of calculating the individual responsibility of families that deviate from the assumed “average” in size. In other words, we shall seek to find a measuring rod for family costs and gifts that will roughly apply to any sized family in any circumstances.

The center of this initial problem is the so-called standard of living. In general, a standard of living may be defined as such a *sum of commodities and services* of all sorts as is habitually consumed in a given length of time—say a year—by a person or a family group of given size and given social status. It is not itself a sum of money but a sum of goods. Its money cost will necessarily vary at different times and places and must therefore be re-calculated periodically. The families for whom such studies have been made with any degree of thoroughness thus far are of the working class; and the “average” size assumed for them has been five members—father, mother, and three dependent children. (This roughly corresponds to the actual proportion of children per family in our population.) With this “bed-rock” or only abstractly typical family as a basis, we are to inquire three things: (1) How the *money cost* of supporting such a family (in a given locality at a given time—*i.e.*, the beginning of 1921) varies with successive levels of living: (2) How it varies with variations in the membership of the family group; (3) How it varies in different parts of the country, between country and city, and between certain typical large cities.

1. *The Cost of Various Standards of Living for the “Typical” Family; Average Gifts of the Upper Classes.*

When we talk of “successive levels of living” it is not of course to be supposed that we consider the population to be divided into a series of well-defined income strata, each with its own social code of necessary ex-

penditure. In real life the habits of the population are very probably as gradually merging as the incomes they represent; presented graphically, they would follow a rough curve rather than a series of steps. Nevertheless for general purposes of description it is permissible to pick out characteristic points along the curve and to make generalizations concerning them that shall apply to adjacent areas as well—just as in a continuous run of color we may say, This is white; this, grey; this, black.

The family long chosen as typical by students of working-class budgets, consists, as we have already pointed out, of father, mother, and three children under fourteen. Recently this standard has been further refined (for the sake of making exact comparisons possible) by assigning more definite ages to the children,—namely, one child in the age group 11 to 14, one aged 6 to 10, and one 2 to 5.¹

For a working-class family of this type, three common levels of living have been described by experts: the first of these has been termed the pauper, or far better the poverty level; the second, the minimum of subsistence level; while the third is variously known as the “minimum comfort,” “minimum health and decency,” or simply the minimum “American” standard.

It is of course impossible to assign an exact and separate meaning to each of these terms, for in reality they represent three points on a continuous curve rather than three successive steps. However, with a rough degree of accuracy they may be defined as follows:

a) *The Poverty Level.*

This is the level on the ragged edge of self-support where any slight disturbance of the daily equilibrium will suffice to throw the family into destitution. It is the level with which charitable societies have commonly to deal, and upon which their budgets are ordinarily based. The families living at this level ordinarily either view their situation as only temporary and are therefore willing to live through it as sparingly as possible, or they belong to the great group of rather dull-witted persons who “do not know any better”; in any case they have to forego many of the essentials of a normal existence: they allow their stock of capital goods (house furnishings, clothing, etc.) to deteriorate, make no provision for the future in the way of savings, and spend a quite inadequate amount upon their social and mental life. In general it may be said of this level that the physical necessities in their crude forms pre-

¹ The United States Bureau of Labor Statistics has recently been using the ages of 11, 5, and 2. The Philadelphia Bureau of Municipal Research, however, uses 13, 10, and 6. (See William C. Beyer, et al., *Workingman's Standard of Living in Philadelphia*, Macmillan, 1919.)

dominate. At April, 1921, prices, studies of this type in New York City listed the cost of food and clothing for the typical sized family at from \$12.50 to \$15.50 a week. Taking the middle figure of \$14.00 a week, and reckoning the food and clothing items as comprising 55 per cent of the whole family expenditure,² we get a yearly total of \$1,324.

At this poverty level we have of course no right to a budget with provision for giving. Where gifts are made in spite of the budget, some other essential item of the family welfare must be (and often is) sacrificed. It is interesting to note, however, that a minimum degree of church support is included by the New York Charity Organization Society as, on the whole, a necessity even for their cases. "In most churches," they say, "a contribution of money is considered part of the act of worship."³ Thus at the very beginning of our series of living standards, among those just at the edge of submergence, the impulse toward benevolence and the shouldering of social responsibility already makes itself felt almost irresistibly. Probably ten or twelve cents a week—all told five or six dollars a year—is as little as any ordinary family so situated will give. When we reach the next stage, that of genuine although scanty self-support, the impulse has won itself a regular place on the budget.

b) *The Minimum of Subsistence Level.*

This differs from the poverty level in that it is on a basis of permanence. Families living at this level are able to "make both ends meet" continuously and all along the line. They enjoy a degree of security so long as their present flow of income remains steady. They have a budgetary past and future as well as present. It begins to pay them to "look ahead." Their necessary household equipment can be continuously replaced, and the members of the family maintain their normal social relationships. However, the physical necessities still largely predominate, and no adequate provision can as yet be made for the future. This level has been found to be of great importance for the statistician to determine, since it fixes the point below which regular wages should in no case be depressed. Our leading budgetary studies deal with this level. At March, 1921, prices in the eastern industrial

² In accordance with the findings of the United States Bureau of Labor Statistics, *Monthly Labor Review*, August 1917, p. 118, in industrial centers throughout the country of the budget distribution of 12,000 white families ranging in income from \$1200 to \$1500.

³ See *Budget Planning in Social Case Work*, September, 1919, p. 15.

centers it costs from \$1500 to \$2000.⁴ The distribution of the budget at December, 1920, prices in Philadelphia would be as follows.⁵

Item	Cost	Per cent of Total
1. Rent, Fuel and Light	476	26.6
2. Food	572	31.9
3. Clothing	332	18.5
Wife	83	4.6
Husband	74	4.1
Children	175	9.8
4. All others	412	23.0
Total	1792	100.0

Within this last series, about 2.6 per cent (\$47) of the family total would have been spent for health, 1.3 per cent (\$23) for recreation, 1 per cent (\$18) for education and reading, 3.2 per cent (\$57) for insurance, .5 per cent (\$9) for church and charity.⁶

The allowance for church and charity is thus very low, being only

⁴ *I.e.*, following primarily the very excellent study of the Philadelphia Bureau of Municipal Research, (William C. Beyer, *et al.*, *Workingman's Standard of Living in Philadelphia*). Their total for October, 1918, was \$1637. At December, 1920, prices it amounted to \$1847 and at March, 1921, prices, to \$1743. The famous Chapin estimates of \$800 to \$900 for New York in 1907 would (counting the original at \$850) cost about \$1900 by the winter of 1921. Professor Ogburn's study of New York Shipyard workers which gave about \$1390 in June, 1918 (see W. F. Ogburn, "Measurement of the Cost of Living and Wages," *Annals of the American Academy of Political and Social Science*, January, 1919, p. 7) amounted by the end of 1919 to about \$1830. The National Industrial Conference Board figures for mill workers in West New York, on a questionably pinched budget, gave \$1616 in January, 1920 (*Special Report No. 7*, March, 1920). None of these studies, however, can compare with the Beyer standard for accuracy, as it is on a commodity basis throughout, and has all its items most carefully sifted. As a bare subsistence minimum (for which it was not originally intended) the Beyer standard is perhaps somewhat full, particularly as regards housing; by arbitrarily deducting about 3 per cent or so, we shall however make it quite safely conservative for our purposes, thus fixing the total at December, 1920, prices at about \$1792.

⁵ On the assumption that the decrease between August, 1920, and March, 1921, was evenly distributed. The rest of the budget in August, 1920, was \$1988; in March, 1921, \$1742. *Citizens Business*, No. 463, p. 4. The amounts of money allowed for the various objects, as has been said, have been scaled down 3 per cent. The proportions however remain unchanged.

⁶ This percentage distribution corresponds to the actual distribution of miscellaneous items by the 255 self-supporting families studied by the Philadelphia Bureau: the standard budget merely dealt with these items en masse (see pp. 16, 19, 82, and 85, and also pp. 38-46). Since these actual families averaged about 15 per cent below the standard budget in total income, it is highly probable that their miscellaneous column may be at or below the true "subsistence" level: Their charitable contributions may well appear smaller than they should.

about one-half of one per cent. However, as compared with the less than one and one-half per cent (about \$23) expended for all forms of recreation and amusement for a year by this family of five persons, the sacrifice it represents cannot be small. If we add to this item the "gifts of friendship," which the Philadelphia study gives,⁷ the total reaches seven-tenths of one per cent, or approximately \$12.

At this subsistence level of from \$1600 to \$1700, then, we may fairly assume that the average amount contributed ranges somewhere around one-half to three-quarters of one per cent. By the time the income curve has reached \$2,000, the donations will have reached at least one per cent.

c) *The Minimum Comfort Level.*

When we reach this point which, as we have said, is variously termed, we find budgets taking cognizance fully and openly, if with caution, of the social as well as the physical scale. Some allowance begins to be made for gala clothing for the adults, especially the wife, more toys for the children, more presentable house furnishings, more amusements, and a larger miscellaneous expenditure all along the line, together with a better margin of provision for the future. Such a budget (according to the Bureau of Labor Statistics) cost in August, 1919, in the city of Washington about \$2,260.⁸

By December, 1920, it would have cost approximately \$2,400.⁹ The distribution of expenditures in it as compared with the Philadelphia subsistence budget at the December, 1920, price level is shown in Table 7.

The difference between these two standards is blurred because of the fact that the rents of the workingmen's residences and apartments rose far more rapidly in Philadelphia than they did in Washington. In consequence it would have actually cost more money in December, 1920, to secure the Philadelphia standard of housing than the Washington one. Aside from this, however, it will be seen that the Washington standard calls for a much larger expenditure on food, clothing, and incidentals than does the Philadelphia standard. Thus the food allowance in the Washington comfort standard is approximately 40 per cent higher than that of the Philadelphia subsistence standard, and that for women's clothing more than doubled.

⁷ Beyer, *op. cit.*, Table XIX, p. 85.

⁸ See their Tentative Quantity and last Budget.

⁹ The relative cost of living as compared with December, 1914, is given for June, 1919, December, 1919, and December, 1920, in the *Monthly Labor Review*, February, 1921, p. 57. Under the assumption that the increases between June and December, 1919, were evenly distributed, the increase from August, 1919, to December, 1920, was from 176.7 (on a December, 1914, base) to 187.8, or a 6.3 per cent rise.

TABLE 7.—COMPARISON OF "MINIMUM COMFORT" WITH "MINIMUM OF SUBSISTENCE" STANDARD

Item	Amount Allowed in Washington Comfort Budget		Amount Allowed in Philadelphia Subsistence Budget	Excess of Comfort over Subsistence Budget
	Amount	Per Cent		
1. Rent, Fuel and Light.	444	18.5	476	-32
2. Food	826	34.4	572	254
3. Clothing	550	22.9	332	218
(a) Husband	131		74	57
(b) Wife	177		83	94
(c) Three Children..	242		175	67
4. All Others*	580	24.2	412	168
(a) Health	82		47	35
(b) Recreation* ...	41		23	18
(c) Education and Reading*	19		18	1
(d) Insurance	118		57	61
(e) Church and Charity*	31		9	22
Total	2400	100.0	1792	608

* The separate items in the "All Others" column that are starred are not compiled solely from the Washington budget, but are composite in nature, depending in part upon the findings of a whole group of "fair standard" budgets that have more representative data for them. The Washington budget in the first place contains no direct evidence on church and charity. It arbitrarily assigns \$13 as the minimum possible contribution to the church (on a basis of its being equal to 25 cents a week for the whole family), while it lumps charity in with moving expenses, stationery and postage, and other incidentals to which it assigns an arbitrary total of a dollar a week or \$52 a year. "No minimum quantities," says the report, "can possibly be specified for those items."

If we choose to assume that charities exactly equalled the hypothetical church contributions, we should have a total of \$26. But it seemed preferable to look first at other budgets, and so we find the "fair" standard of Messrs. Cotton and Little for a Philadelphia textile-workers' family in March, 1919, to require \$23 for this purpose—which, brought up to date and increased to correspond to the Washington total budget, amounts to \$32. Similarly with the Bellevue Hospital's decent (*i.e.*, barely above subsistence) standard of 1917. Advanced to the total of the Washington standard its contribution to church alone amounts to over \$23. (See Bureau of Applied Economics: Bulletin Number 7, pp. 156 and 114.) Finally the District of Columbia minimum of subsistence budget of 1916 itself allowed \$11 for church alone out of its total of \$150, or a rate of one per cent. That again would make \$23, in terms of the Washington total. (See W. F. Ogburn, *Analysis of the Cost of Living in the District of Columbia in 1916*.)

In the second place the Washington budget, again regardless of concrete data, makes no allowance for reading or education other than the \$8.40 required for a daily paper. Yet even the sadly skimmed budget of the National Industrial Conference Board for Fall River and Lawrence allowed \$13 for those items, which, again brought up to the Washington total standard, amounts to \$20. The Philadelphia textile-workers' budget allows \$22 (Bureau of Applied Economics, *op. cit.*, pp. 79, 87 and 156).

Finally recreation is listed at \$20, instead of the \$40 actually spent by the government employees upon whom the figure is based, on the ground that the other \$20 represented overnight trips (*i.e.*, "vacations") which a "minimum comfort" family should do without. Yet even the Industrial Conference Board figures unrevised give \$52 (revised \$75), and the Kensington figures revised \$52. (Bureau of Applied Economics, *op. cit.*, pp. 79, 87, 156.)

A glance at the table suffices to show that it represents a standardization of actual budgets rather than the construction of an abstractly ideal one. Probably no critic unfamiliar with wage data would suppose that so much of the new surplus would go into better food and clothing—especially women's clothing—and so little into, for instance, reading-matter. However, the showing for insurance is creditable, and church and charity show a distinct advance. Doubtless a further constriction in the material wants could take place if charitable demands of a very appealing sort were felt by the family.

d) *Standards of Living and Giving of Middle and Upper Economic Classes.*

When we pass beyond the minimum comfort level, we leave behind the field of accurate statistical data on actual expenditures. From then on, we have to depend largely upon observed tendencies in the various income groups together with the amounts shown by the income tax returns to have been donated by them for philanthropic purposes.

In general it is safe to say that among the lower middle-class professional groups receiving from \$2,500 to \$3,500 or possibly \$4,000 a year the proportion spent for housing and for such cultural items as education, reading matter, etc., tends to increase rapidly with frequent and occasionally injurious economizing in food and clothing.¹⁰ The lower middle-class business group, receiving from \$2,500 to \$4,000, undoubtedly expends more for material comforts and less for cultural goods and services than the professional men of equal income, but it is doubtful whether their contributions to charity are as great.

From \$4,000 up, there is in general a rapid expansion in the number of luxuries purchased. There is also a sharp increase in the amount devoted to personal service. With the satisfaction of the physical necessities and with increases in the income, expenditures for purely emulative and conventional purposes become more characteristic. In general it is, of course, perfectly true that each additional dollar is devoted to satisfying less urgent wants than the preceding one, and consequently means less to its possessor. The exact degree to which the importance of the dollar decreases with the income cannot, however, definitely be ascertained.

¹⁰ Thus the families of thirty-seven University of Washington professors, with a total average expenditure for the year October, 1918, to October, 1919, of approximately \$2,800, spent 27.49 per cent of this for rent, fuel and light, but only 11.99 per cent for clothing and 27.4 per cent for food. See *The Salary Situation at the University of Washington*, published by the Association of Instructors of that University. Of the total, 2.5 per cent was reported as spent for church and charity, which means in reality probably somewhat more.

While information is lacking concerning the proportions spent by the upper income groups for the various purposes listed, some light is thrown upon the relative amounts contributed to philanthropic and religious enterprises by the volume on *Statistics of Income For 1916* published by the Internal Revenue Bureau of the Treasury Department. The results of that study are shown in Table 8.

It should be realized that the contributions listed in this table do not by any means comprise the total amount given for religious and philanthropic purposes, for the following reasons: (1) Gifts made directly to individuals were not granted exemption under the income tax law and hence are not included in the figures given. (2) A very large proportion of givers, particularly among those of small incomes, neglected to report the full amount of their contributions, while many others failed to list theirs at all. There were moreover an extremely large number of persons who should have reported their incomes but who failed to do so, and whose contributions in consequence are not shown in the table. (3) Contributions in excess of 15 per cent of an individual's income were not exempted from taxation and therefore do not appear in the statistics given. While the number of such individuals was probably relatively small, the total amount of their donations would bulk large.

TABLE 8.—PHILANTHROPIC CONTRIBUTIONS IN 1916 UPON WHICH EXEMPTION WAS CLAIMED

Income Group	Total Net Income (millions of dollars)	Contributions (millions of dollars)	Per cent
\$2,000- 4,000	3,422	47.2	1.4
4,000- 6,000	1,406	19.1	1.4
6,000- 8,000	747	12.4	1.7
8,000- 10,000	501	8.3	1.6
10,000- 15,000	796	14.9	1.9
15,000- 25,000	891	19.5	2.2
25,000- 50,000	1,042	23.8	2.3
50,000-100,000	847	23.9	2.8
100,000-250,000	782	28.7	3.7
250,000-500,000	303	12.9	4.2
Over 500,000	521	35.5	6.8
Total	11,191	245.1	2.2

These statistics seem to indicate (a) that the *relative* amounts which are given do not vary greatly for incomes under \$10,000 a year—ranging around one and one-half per cent; (b) that the proportionate increase in giving on the part of those receiving over \$10,000 is very slight until \$100,000 is reached; and (c) that above \$100,000 the percentage donated increases appreciably with increases in income—those receiving over \$500,000 annually donating approximately 7 per cent

of their income. If the income groups are subdivided more minutely than in Table 8, it will be found that those receiving over \$4,000,000 annually contributed approximately 10 per cent to charitable purposes.

Here again it should be borne in mind that members of the lower income groups were undoubtedly not so careful in reporting their donations as were those of larger incomes, who were subject to a much higher tax rate, so that in reality the former gave more than is indicated. It is probable, however, that this negligence would not apply appreciably to those receiving above \$10,000. It is probable therefore that the present rate of giving is not much more than proportionate for incomes up to \$50,000. It is indeed possible that the men with incomes of from \$2,000 to \$4,000 actually contribute a higher percentage than do those between \$10,000 and \$100,000.

2. *Variations in the Composition of the Family and How to Allow for Them.*

So far we have merely been considering one variable in a problem of three. We have been discussing the typical cost of successive levels of living, and the typical size of charitable contributions accompanying them. That will give us some basis for the construction of an equally generalized reformed scale later on. But it will not help all of the givers for whom that scale is primarily intended: for what we have been examining throughout has been the expenditures of the "average" family—already defined for statistical purposes as a father, mother, and three children under fourteen.

Such a family, however, is certainly not the exclusive and perhaps not even the predominant type, and it is necessary to determine how expenditures are to be allotted in families that depart in varying degrees from this model. It is a familiar fact in calculating food budgets that children and old people cost less than adults to feed; that women on the whole cost less than men; and that very young children cost the least of all. It is also a familiar fact that the very small family labors at a disadvantage as compared with one of average size in the matter of per capita food cost: the smaller the family, the greater being the inevitable waste.

Now both of these facts have a wider application than the area of the food budget alone. They are symptomatic of a very marked general tendency in all household expenses. To put it dogmatically: (1) *total family expenditures tend to vary directly as the sex and age of the component members*; (2) *the smaller the family, the larger the overhead*.

(1) Nutrition experts have calculated very closely the number of calories (that is, units of heat energy) required by a normal man at various kinds of work ranging from strictly sedentary to very muscu-

lar work. With a somewhat less degree of accuracy they have calculated the number of calories required by women, children of various ages, and old persons. The average consumption (some 3,000+ calories per day) for a man of medium size at moderately heavy muscular work, they have taken as their standard unit, and have expressed the normal consumption of women and children in terms of percentages of this standard, or, as it is technically called, of "equivalent adult males." Thus in the stereotyped family of five with which our working class budgets deal, the father has been counted as 100 per cent, the mother as 90 per cent, a boy of thirteen as 90 per cent, a girl of ten as 75 per cent and a child of six as 40 per cent. In detail the scale would run as follows:¹¹

Age	Percentages of normal adult male consumption	
	Male	Female
Adult (15 or over).....	100%	90%
	<i>Both sexes</i>	
11-14	90%	
7-10	75%	
4- 6	40%	
3 and under	15%	

Now strange as it may seem to the uninitiated, the scale for the total expenditures of the individual members of a workingman's family tends to parallel very closely the scale for their food consumption. This is not merely because food is the largest single item in the individual's budget, but because other expenditures do actually tend to cluster about it as a mean—some running a little higher, some a little lower.

Thus clothing costs throughout the period of childhood range somewhat higher in proportion to the grown man's clothing than do food costs to his food; while amusements and sundries on the other hand range considerably less. (The boy of six in our Philadelphia subsistence standard was rated¹² as 50 per cent of his father in food consumption, while his clothing cost \$43 as against his father's \$74, or 58 per cent.)

As to housing and the other remaining household costs that are inextricably merged, it can only be estimated that the younger members

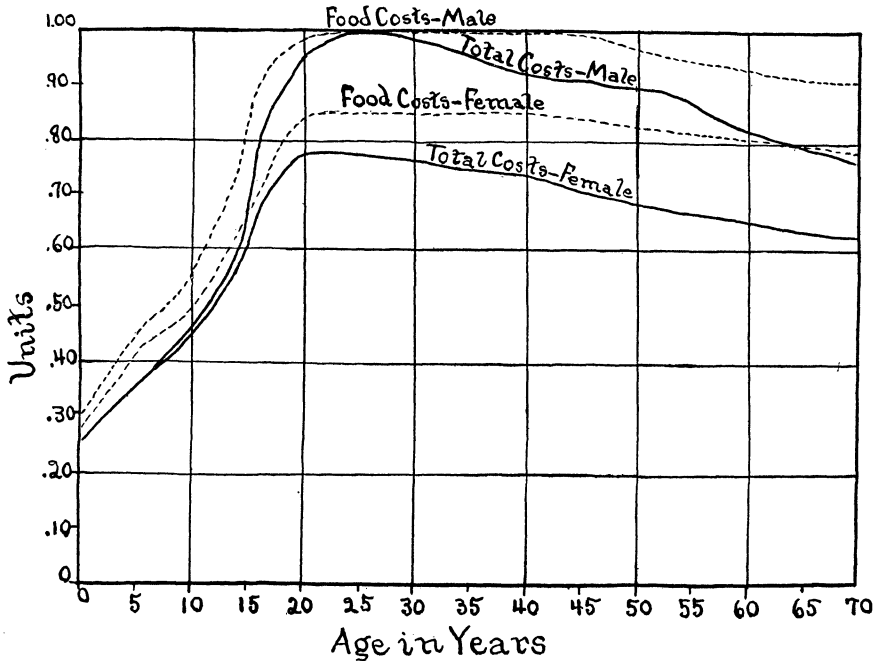
¹¹ This is following the revised scale of the United States Bureau of Labor Statistics (*See Monthly Review* of the U. S. Bureau of Labor Statistics, November, 1917). Their old scale ran somewhat lower, especially for women, following in the footsteps of the well known Atwater scale (*See Eighteenth Annual Report of the Commissioner of Labor*, 1903, "Cost of Living and Retail Prices of Food"). A new scale of superior accuracy is that issued by Messrs. King and Sydenstricker under the auspices of the United States Public Health Service, "A Method of Classifying Families According to Incomes in Studies of Disease Prevalence," *Public Health Reports*, November 25, 1920 (Vol. 35, No. 48) pp. 2829-46.

¹² In accordance with Atwater Scale.

of the family require less than would be indicated by their food ratio; while as to the mother's services—if any economic value at all is to be attached to them—it is obvious that the younger children require a disproportionate share. All in all, therefore, and giving due weight to the two major items of food and clothing, it may be said *a priori* that the relative costs of the individual in a household will vary according to sex and age much as do his food costs. This view has been put forth more or less informally in three publications of recent date¹³ and has since received authoritative confirmation from the very precise study of Messrs. W. I. King and Edgar Sydenstricker.¹⁴ Their scale, reduced to graphic form, runs as follows:¹⁵

CHART I

REPRINTED THROUGH COURTESY OF THE UNIVERSITY OF CHICAGO PRESS FROM THE JOURNAL OF POLITICAL ECONOMY, VOL. XXIX, No. 7, P. 588.



¹³ See Messrs. Sydenstricker, Wheeler and Goldberger, "Disabling Sickness among the Population of Seven Cotton Mill Villages of South Carolina in Relation to Family Income," *U. S. Public Health Service Reprints No. 493 P. T.*; W. F. Ogburn, "Analysis of the Standard of Living in the District of Columbia in 1916," *Quarterly Publications American Statistical Association*, June, 1919 (reprint), p. 12; Dorothy W. Douglas, "The Cost of Living for Workingwomen," *Quarterly Journal of Economics*, Feb., 1920.

¹⁴ King and Sydenstricker, *op. cit.*

¹⁵ See "The Classification of the Population According to Income, *Journal of Political Economy*, July, 1921, p. 588.

Briefly, it may be said (1) that at the level of bare subsistence the relation of food costs to total costs is one of constant correspondence, and (2), that on the whole, total costs tend to range a little lower—to the degree of something like 8 or 10 per cent.

Now both of these points are of great significance for the families with whom the study originally deals—that is, families at the ragged edge of subsistence, at what we should call the “poverty” level.¹⁶ But when we pass beyond this level to the well-to-do groups with whom we are chiefly concerned, the scale requires a certain amount of adjusting. The total-costs scale still parallels that of food costs, but we have reason to think that it no longer runs appreciably below it. On the contrary, as we reach some of the higher income groups, there is every reason to suppose that in certain cases the total-costs scale is the higher. The evidence is as follows:

a) As we pass from the poverty level through the subsistence and on to the minimum comfort level, we find that women and children, but especially women, spend a far greater percentage of the family income on their clothing than they did before. In our tables, it will be recalled, the percentage for women after they had passed the poverty level ran: subsistence level 4.6 per cent, comfort level 7.4 per cent, while the expenditure for men increased only from 4.1 to 5.5 per cent. In other words, the expenditure for women *in terms of that for men* jumped from 112 per cent to 135 per cent. Had we started from the poverty level we should have found the difference even more striking.¹⁷

b) Now aside from food, clothing is the largest individual item listed in the total-costs group. Not only so, but for poverty families it is nearly the *only* item that deserves to be so distinguished, the others are so small: clothing outweighs all the rest combined. So any marked tendency of this clothing item is sure to be reflected overwhelmingly in their total. If it is small (for women as compared to men), then their total will appear correspondingly small.

Therefore we shall undoubtedly be justified in slightly raising the total-costs scale when we deal with the great mass of well-to-do groups, until it corresponds exactly with our established food-costs scale; and when we deal with the wealthy, perhaps in raising it even a little more in the case of young women, allowing them as much as their brothers and husbands—in other words, ranking them as 100 per cent expensive.

Before we thus employ our established food-costs scale (of the Bureau of Labor Statistics),¹⁸ however, we must in turn modify it a very

¹⁶ The study covered a series of Southern cotton-mill villages.

¹⁷ Professor Ogburn takes as one of his criteria of the poverty level the point at which the wife's clothing budget falls below 75 per cent of that of husband. Messrs. King and Sydenstricker's families bear out his contention. *Op. cit.*, p. 592.

little by introducing some of the refinements of its King- Sydenstricker successor. The latter runs closer to the old Atwater scale and its quota for infants is twice as great; beyond that its chief difference is a marked drop for both sexes in the older middle-age group as well as in the old-age group proper. To avoid criticism and steer a middle course we have chosen to hew as close to the line of the Labor Statistics scale as possible, making adjustments where necessary. The proposed scale is as follows:

*Table of Standard Expenditures
(All items combined) for the Members of a Family Group, Expressed in Percentages
of Adult Male Expenditure*

Age	Percentages of Adult Male Expenditure	
	Male	Female
0- 3 years.....	23%	
4- 6 ".....	40%	
7-10 ".....	60%	
11-14 ".....	80%	
15-18 ".....	90%	
Adult (19-50).....	100%	90%
Middle Age (50-60).....	95%	85%
(60-70).....	90%	80%
Old Age (over 70).....	80%	70%

In terms of this scale the family we have used as typical of our population as a whole consists of 3.33 "adult male units"—such as would be furnished by a father, mother, and three children in the age groups of 11 to 14, 4 to 6, and under 3 respectively.¹⁹ That forms the "standard" unit of our calculation of charitable contributions. A given family can then measure its obligations in terms of its departure from this model. In other words, to calculate roughly his family's normal expenditure in terms of adult male units, a man has merely to add up these food consumption figures. Thus a family consisting of father aged fifty, mother, fifty, daughter, twenty, and grandfather, eighty, would rank $1.0 + .9 + .9 + .8 = 3.6$, or .27 more than the "standard" family of 3.33. It would thus be normal for them to spend practically 9 per cent more than the sum indicated as proper for the "standard" family of their particular income group. (If they belonged to the very wealthy class, the twenty-year-old daughter would rank even higher—1.0 instead of .9—so that the family total would become 3.7 and its normal excess of expenditure over that of the standard family would become 11 per cent.)

¹⁸ See Bureau of Labor Statistics *Tentative Quantity and Cost Budget for Washington, D. C.*, Aug. 1919, page 10. For the whole family, clothing costs are about equal to all miscellaneous items combined (about 24 per cent).

¹⁹ This standard of 3.3 male units has recently been adopted by the Royal Commission on the cost of living in Australia. (See H. Heaton, "The Basic Wage Principle in Australian Wages Regulation," *The Economic Journal*, Sept., 1921, p. 315.)

This simple process of calculation becomes slightly more complicated when we are dealing with unusually large or unusually small families. As previously indicated, the former can normally effect a considerable per capita saving through reduced "overhead" costs, while the latter have a high "overhead" as compared with their small numbers. The Charity Organization Society of New York meets this disparity in the case of their families' food budgets by reducing the per capita allowance 5 per cent in the case of families of six members; and conversely, increasing the per capita allowance 5 per cent for families of three, and 10 per cent for those of two.

Adapting this method to the requirements of our well-to-do families, we have the following modification of our previous table:

1.	Costs for family of 4 to 6 members	= normal (as given above)
2.	(a) " " " " 7 members	= - 5%
	(b) " " " " 8 or more "	= -10%
3.	(a) " " " " 3	= + 5%
	(b) " " " " 2	= +10%

A still further complication enters into our calculation when we deal with one important type of the small family—the young married couple with one child or as yet none. Such a couple should normally be laying by heavily for the future when their expenses are to be at their maximum. It seems only fair, therefore, to increase the normal per capita budget for such a family by the inclusion of an extra-heavy savings item. For the couple with one child this may well be 5 per cent of their previous budget; for the couple with none, 10 per cent.²⁰ In calculating the proper budget for such a family, therefore, we have to add two modifying factors at once—the extra overhead and the extra savings. A childless young couple, therefore, after calculating their budget on the basis of 1.9 adult male units, would add to it 20 per cent—10 for extra overhead and 10 for extra savings.

Additional questions in regard to family expenditure must now be laid aside until the discussion of the final income-group table in Chapter V, and we must turn briefly to the consideration of the budgets of the single man and single woman.

Here again we are forced roughly to adapt calculations intended for persons at or below the minimum comfort level. For women our best data come from the decrees of our various minimum wage boards; for men, from the estimates of the Bureau of Labor Statistics and the Federal Board for Vocational Education.

²⁰ Thus the Bureau of Labor Statistics, in speaking of the Minimum Comfort level in the District of Columbia, says: "An average saving of 12½ per cent of yearly salary during an (low-salaried Government) employee's single and early married life would seem to be the maximum which could be expected." (Bureau of Applied Economics, *Standards of Living*, page 311.)

In the case of women, we may sift the very large body of evidence of our minimum wage boards which indicate that the present health and decency level falls between fifteen and twenty dollars a week, and accept the \$16.50 budget of the District of Columbia (Aug., 1919) as typical. This \$16.50 a week (allowing for two weeks of illness or unemployment in the year) makes an annual wage of \$825.²¹ But the corresponding "minimum comfort" budget for our "standard family" cost at that time in Washington, D. C., about \$2,250, or \$676 per "equivalent adult male." The single woman's budget therefore in terms of "adult male units" amounts to 1.2.

For the single man, a District of Columbia budget at the minimum comfort level has been assessed by the Bureau of Labor Statistics at about \$1,000. This is again probably somewhat higher than the corresponding family standard, although not as much so as the woman's budget. It corresponds within a hundred dollars with the very rough figures derived from the data secured in the Northwest by the Federal Board for Vocational Education. Their returns from seven of the largest cities of Washington and Oregon indicate that in 1920 the cost of board and lodging for single men there averaged \$40 to \$45. But it is a familiar fact to students of the standard of living that food and rent at this level normally cover about 55 per cent of the budget. Applying this assumption to the figures of the Vocational Board, we get something over \$75 a month, or about \$920 a year as the single man's budget in the Northwest or 1.3 in terms of "equivalent adult males."

In the case of the young single man, however, who is saving up for a future family, it will be fair to allow an additional 10 per cent for this extra saving.

In the case of the young woman who is doing likewise, an additional saving of 5 per cent over *her* budget will be in order.

(For all these figures, see Table 9, p. 64.)

3. *Variations Due to Differences in Time and Place.*

At the beginning of this chapter it was stated that the figures cited for the "standard family" applied to one time and one region—eastern industrial centers in the early winter of 1921. At other times and places the identical standard might cost more or less. How then should we allow for these variations in the calculations of which our "standard family" is the base?

²¹ True, this wage is in striking contrast to the \$1050 declared more recently to be the minimum comfort budget for women by Dr. Royal Meeker but repeated studies of similar budgets convince the authors that the word "comfort" as used in this budget does not denote exactly the same thing as it does in the family "comfort" minimum of \$2250; that it embodies a higher grade of goods and services and represents a somewhat higher level of life.

TABLE 9.—FINAL TABLE OF STANDARD EXPENDITURES (ALL ITEMS COMBINED) FOR THE MEMBERS OF FAMILY GROUPS OF VARIOUS SIZES AND FOR SINGLE MEN AND WOMEN

(Unit = Adult Male Expenditure in Standard Family)

I. Family of 4-6 Members (= "Standard")

<i>Age</i>	<i>Percentage of Male Adult Expenditure</i>	
0- 3 years.....	23%	
4- 6 "	40%	
7-10 "	60%	
11-14 "	80%	
15-18 "	90%	
	<i>Male</i>	<i>Female</i>
Adult (19-50)	100%	90%
Middle Age (50-60).....	95%	85%
(60-70).....	90%	80%
Old age (over 70).....	80%	70%

II. Family of Less or More than 4-6 Members

<i>Size of Family</i>	<i>Additional or Lessened Cost (in Percentages of "Standard" Family Cost)</i>	
7 members	— 5%	
8 or more members.....	—10%	
3 "	+ 5%	
2 "	+10%	

III. Single Men and Women (in Terms of Adult Male Expenditure in Standard Family)

Single Men = 130%*

Single Women = 120%*

* 5-10% extra to be allowed in case of heavy savings.

a) Changes in the cost of living from one year to another are published regularly by the United States Bureau of Labor Statistics and the National Industrial Conference Board,—changes, that is, for the cost of such commodities as enter normally into the budget of a manual or clerical worker's family. For a wealthy family, the changes may vary slightly (since miscellaneous items weigh so much more heavily in their budgets), but the chances are that such a difference is negligible.²² In order, therefore, to revise our present budget scale at any future time, it will merely be necessary to raise or lower it by the index number of the cost of living at that time.

b) With the variations in cost from place to place we meet a more serious problem. It has three phases: (1) variations between different sections of the country; (2) variations between individual cities within the same section, and (3) variations between urban and rural regions.

Variations between sections of the country (between the North, South, Middle West, and Far West). These are probably not so large as is ordinarily supposed. Data gathered by the United States Bureau of Labor Statistics go to show that the cost of a standard year's budget of twenty-two principal food articles in thirty-nine of the lead-

²² See Beyer, *op. cit.*, on the closeness with which changes in the cost of miscellaneous items parallel changes in the cost of food, clothing, and shelter.

ing cities of all parts of the country varies as follows in the different sections.

Variations in the total cost of standard year's budget of 22 principal food articles between the different sections of the United States. Time, 1919²³

(Average cost in the Northeast = 100)

Average cost in 11 cities of the Northeast.....	\$667.25	=100%
“ “ “ 12 “ “ “ South	652.87—	= 98%
“ “ “ 10 “ “ “ Middlewest	602.01	= 90%
“ “ “ 6 “ “ “ Far West	614.43	= 92%

Average of all four sections..... \$633.14 = 95%

In general, therefore, it may be said that the urban variation in cost of food between different sections of the country does not exceed 10 per cent, and that on the whole the Northwest is the most expensive section, closely followed by the South, with the Far West and Middle West lagging somewhat in the rear. It must, however, be remembered that identical commodity budgets do not necessarily mean wholly equivalent living standards, since there is always a further variation brought about by local customs of consumption. (E.g., a moderate clothing budget in the South or the Far West need not contain so great a variety of garments for changes of temperature as does one in the East or Middle West. Likewise habits of food consumption vary).

Next to food, clothing and shelter are the items occupying the largest single shares of the budget. No statistical evidence is to be had in regard to their relative cost, but a few *a priori* considerations may not be out of place. Clothing is somewhat lower in the East and Middle West than on the Pacific slope. Shelter varies enormously from locality to locality *pari passu* with ground rent, but hardly otherwise. In so far, then, as we are dealing with cities of equal size and population pressure, there is little likelihood of any marked inter-sectional difference.

Miscellaneous items ordinarily vary in cost as the three main items combined. So far as evidence and inference can lead us, therefore, we are probably safe in assuming that, in cities at least, the cost of a truly identical commodity budget does not vary more than 10 per cent from one great section of the country to another. In rural regions, owing to the problems of isolation and inaccessibility, the general inter-sectional variation may be greater.

Variations between Individual Cities within the same section. The cost of the standard food budget in the lowest city of the Northern Section (Buffalo \$611.36) was 14 per cent less than in the highest city

²³ Computed from data submitted by the United States Bureau of Labor Statistics to the U. S. Senate Subcommittee of the District of Columbia Committee in September, 1919, and published in the Bulletin issued by the Bureau of Applied Economics—*Changes in Cost of Living, 1914-1919*, p. 29.

(Fall River 707.36), but the remaining nine cities were grouped within a range of 6 per cent. In the Southern section the lowest city (Louisville \$622.59) was 8 per cent less than the highest (Charlestown \$675.65) and nine of the twelve cities fell within a latitude of 5 per cent. In the Middle West only 8 per cent separated the lowest city (Minneapolis \$577.71) from the highest (Cleveland \$628.25), while seven of the ten cities were within a range of 4 per cent. Finally, on the Pacific coast there was a difference of only a little over 4 per cent between Portland, Oregon, and the highest.

All the foregoing evidence tends to show that the difference in the cost of food between cities of the same section is not great. These conclusions seem to be corroborated by an investigation into the cost of room and board for single men recently conducted by the Federal Board for Vocational Education for Washington, Idaho, and Oregon. Also The Loyal Legion of Loggers and Lumbermen in investigations of the cost of living conducted during 1920 and 1921 found that the cost of living was appreciably higher in many small cities and towns than it was in Portland, Oregon. And Streightoff, in 1915, found that the cost of providing a subsistence budget was approximately 12 per cent less for Buffalo than it was for New York.²⁴ While evidence is scanty, it is therefore probable that the maximum variations between cities of the same section are not much in excess of 10 per cent, and that for the majority of cities the variation is even less. The 1915 investigation of the Canadian Board of Inquiry into the Cost of Living showed that the variation between localities of the same section was not as great as commonly supposed.²⁵

Variations between City and Country. Here the problem for the conscientious assessor of family budgets becomes almost insoluble. Strictly comparable data simply do not exist. The difference between the content of equivalent standards is here even greater than it was between different sections of the country—clothing, dietary, household conveniences, amusements, all are notably different.²⁶ Moreover, it is almost impossible to make adequate allowance for the saving effected by a home garden. The most that can be said is that there is probably a very marked difference in cost in favor of the rural regions and that

²⁴ Fourth Annual Report, New York State Factory Investigating Commission (1915), Vol. IV, p. 1668.

²⁵ See *Report, Board of Inquiry into the Cost of Living in Canada, 1915*, Vol. 2, p. 80.

²⁶ Such clothing e.g. as is bought is of course to all intents and purposes as costly as it would be if purchased in the city. But the conventional standard is different. The countryman can without losing caste wear clothes of which the city dweller would be ashamed.

this difference decreases rapidly as we reach even a small degree of urbanization.²⁷ This would probably be true in part because the content of the standard rapidly becomes adapted to the ways of the life of the city, and in part because certain actual savings, such as low rent and homegrown food, disappear. If one might hazard a guess, it would be that the cost of an equivalent standard is not more than say 10 or 15 per cent lower in the small towns than in the large cities of the same section, and not more than 20 to 25 per cent less in the rural districts themselves.

All these three types of variation, however, show that the cost of living standards we have set, namely, those for eastern metropolises, are ample enough for other localities and sections. For if the urban families we have studied can give certain amounts to charity and save for insurance, how much more can those living in regions of lower living costs? The standards of giving, in other words, which we are to base upon these metropolitan living costs, are minimums, and persons situated in less expensive localities should be able to exceed them.

²⁷ Thus many of the small towns of Oregon, according to the investigation by the 4 Ls, had higher living costs than Portland.

CHAPTER V

THE RECOMMENDED SCALE OF GIVING AND SAVING

1. *Introduction.*

In our preceding chapters we considered the question of national philanthropies in relation to national income, investments, and standards of living, and furnished a rough measuring rod for the relative responsibility of family groups of different sizes. We now come to fitting these data together into the framework of an actual living-giving-saving curve that shall furnish the requisite total and yet bear as equitably as possible upon each income group.

It will be remembered (see the conclusion of Chapter I) that the principles we set before ourselves included:

1. The setting of a "submergence minimum" for the very poor. This is a point sufficient for (physical) subsistence below which no giving and no saving are to be required. All income goes for personal expenditure. This minimum is therefore absolute.

2. The setting of a relative "luxury maximum" for the very wealthy. This is a point sufficient for all the reasonable comforts of life, above which *very nearly all* surplus income is to be requisitioned for giving and for investment. It is best not to make the maximum absolute, but to allow for slight additions of expenditure to it for the successive classes of the extremely wealthy. This maximum is therefore relative.

3. The maintenance of a sound psychological footing throughout by making allowance for people's existing habits of living and giving, especially the relative strength of their natural impulses of generosity and their desire to save.

This last point means not only that we must allow a larger proportion of gifts from the lower income classes (those barely above subsistence) than would abstractly seem proper, but that we must allow as large as possible a proportion of savings from the middle classes, since their anxiety for the future is inevitably so much more pressing than that of the very wealthy.

These latter, it will be found, are more fundamentally affected than any other group. An almost complete dead-stop to expenditure at any point is hard enough to contemplate—the man of great wealth quite naturally feeling it his due to spend a great deal more than his neighbor whose income and accompanying responsibilities are very much less. In so far forth our scale does, is bound to, have a psychological flaw. But the fact is that our prevailing social temper of mind has to receive a setback somewhere, since strict adherence to existing standards of living would yield us no more than we are already getting for philanthropies—which is obviously one side of the very condition we are seek-

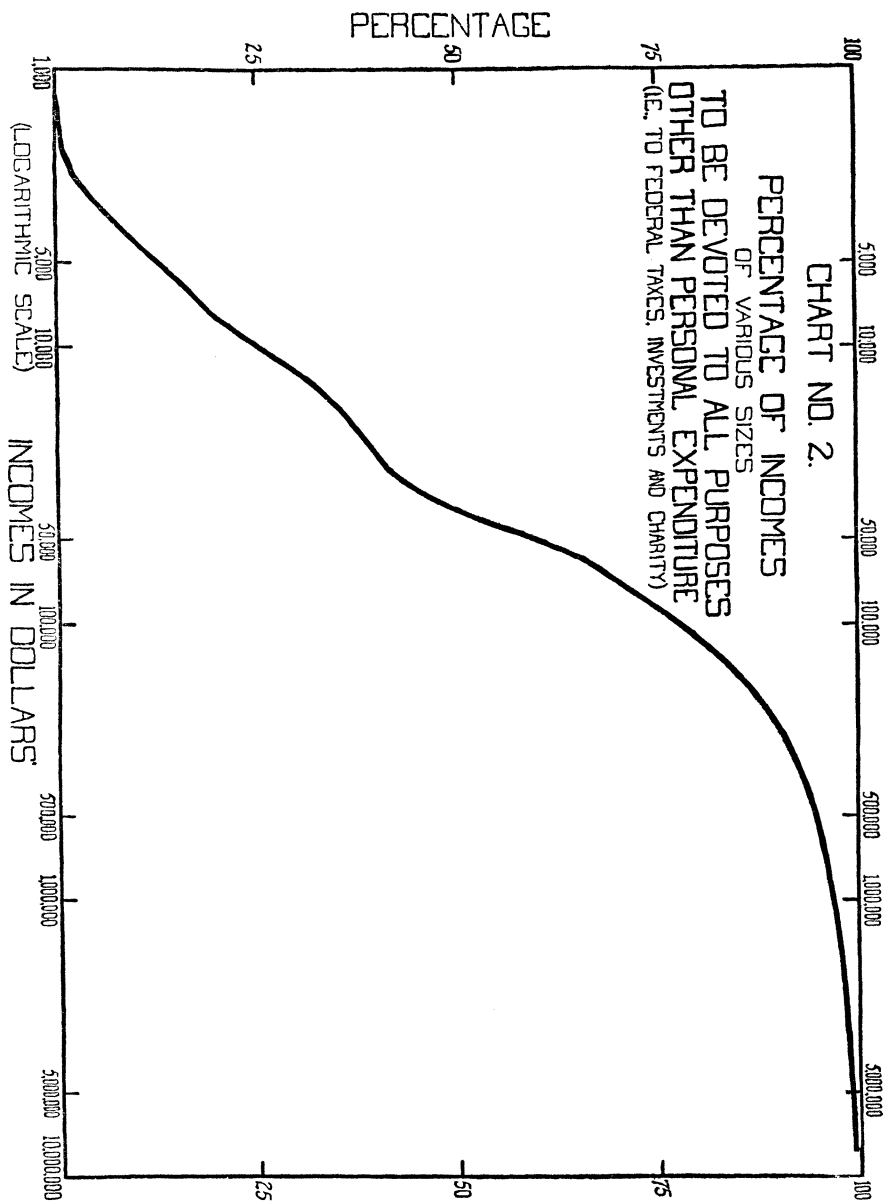
ing to remedy. And the only groups that are able to bear a very greatly increased burden are necessarily the ones in whose hands the greatest amount of surplus is accumulated. And after all, as has been emphasized repeatedly at the outset of this essay, a more healthy attitude among all people toward luxury would make it seem far from absurd to limit any man's maximum expenditure to even so modest a sum as six or eight or ten times that of the average man.

Bearing these general principles of limitation in mind, the present writers have found that the simplest actual method of attack was to begin by taking the total sums needed for the country's philanthropies and for direct investments plus the amounts raised by the Federal Income Tax. We thus secured a total of the sums needed in the country for purposes other than personal expenditure, and then assessed this total upon the population progressively according to increments of income.

By this method, the details of which are given in full in the note to this chapter, we constructed a scale of the proportions which the families of each income group were to devote to all of these purposes combined, and the proportions they were to reserve for personal expenditure. This last includes insurance for families below the \$10,000 level. The "absolute submergence minimum" was set in accordance with the cost-of-living studies at \$1,200 and the "relative luxury maximum" because of social need and the relative adequacy of such a sum for any normal sized family at \$20,000. This sum we treated as a practical maximum, in the sense that all but a few of the extremely wealthy were to remain within a few hundred or thousand of it. A series of experimental "fits" of the scale convinced us that probably the best place for this practical maximum was in the \$40,000 income group. At \$40,000, in other words, half of a man's income is taken for taxes, investments, and gifts, and half left for his own personal enjoyment. Above \$40,000 all fresh increments of income are assessed at so greatly magnified a rate that the man with even a million a year would retain for personal expenditure only a little over \$31,000. Below \$40,000 the scale rises from .1 per cent at \$1,250 to the aforementioned 50 per cent at an increasingly sharp upward inclination.

The general nature of the proportions to be taken from the various incomes in families of the "standard" size for all purposes other than personal expenditure can be shown more clearly in graphic form than by a table.

Chart 2, based on Table 15 (which is in the notes to this chapter), attempts to do this. It uses the logarithmic instead of the natural scale for the axis measuring amounts of income, because in that way it



can compress the whole range of incomes under consideration onto one sheet.¹

¹ Using the natural scale and employing intervals even as short as a tenth of an inch for each thousand dollars, would give us a chart almost 70 feet long! The logarithmic scale telescopes successive distances by treating equal *ratios* as if they were equal sums. Thus the distance from 1 to 10 on a logarithmic chart will be

These sums "for all other purposes" were now sub-divided as follows:

First, the amount of the federal income tax for each income was deducted,² leaving a composite residual amount for charities and investment. This was distributed between the two purposes in accordance with the following principles: (a) That on the poverty level and largely on the minimum of subsistence level as well, the benevolent impulse and social demands would lead families to devote practically all of their scanty surplus in contributions to the church and in acts of individual charity. The dictates of prudence would have very little effect here. (b) That men of middle class incomes should be allowed to save proportionately more of this residual amount than those of greater wealth. This is necessary because the middle class incomes are not only smaller but are primarily derived from personal service and hence are less permanent and more subject to risks than those of the very wealthy, which come predominantly from property. An allowance must be made to compensate for this greater uncertainty and anxiety. Moreover it seems only fair that men on the way up to prosperity should be allowed to save a larger share of their surplus than those who have already arrived, thus affording an opportunity for the building up of small fortunes and discouraging the automatic snowballing of large ones.

The exact manner in which these two principles were carried out can be seen from an examination of Table 16 in the note to this chapter. In brief, incomes of the poverty level (under \$1,500) were allowed to devote all of their meagre surplus for charities. Beginning with the minimum of subsistence level (\$1,500), a small proportion is allowed for investment which increases rapidly until the share of investments reaches its maximum (at \$19,500), and then declines steadily, while that for charity increases until we reach the millionaire class³ (\$55,000 and over) where the two are equal and remain so for the rest of the scale.

2. *The Recommended Scales of Giving and Saving.*

By the methods described, we finally arrived at the actual amounts to be given and invested by the members of our different income groups.⁴

It will be noticed from this table that the rates for both charities and the same as that from 10 to 100 or 100 to 1000. For a clear description of the logarithmic scale see the article by Professor James A. Field, "Some Advantages of the Logarithmic Scale in Statistical Diagrams," *Journal Political Economy*, vol. 25, pp. 805-41. See also, Irving Fisher, "The Ratio Chart," *Quart. Pub. American Statistical Association*, June, 1917, pp. 577-601.

² That is, according to the income tax rates of 1920. The recent reduction will release more funds for both charities and investment.

³ Millionaire, that is, on the basis of capitalizing the income.

⁴ See note for further detail on method.

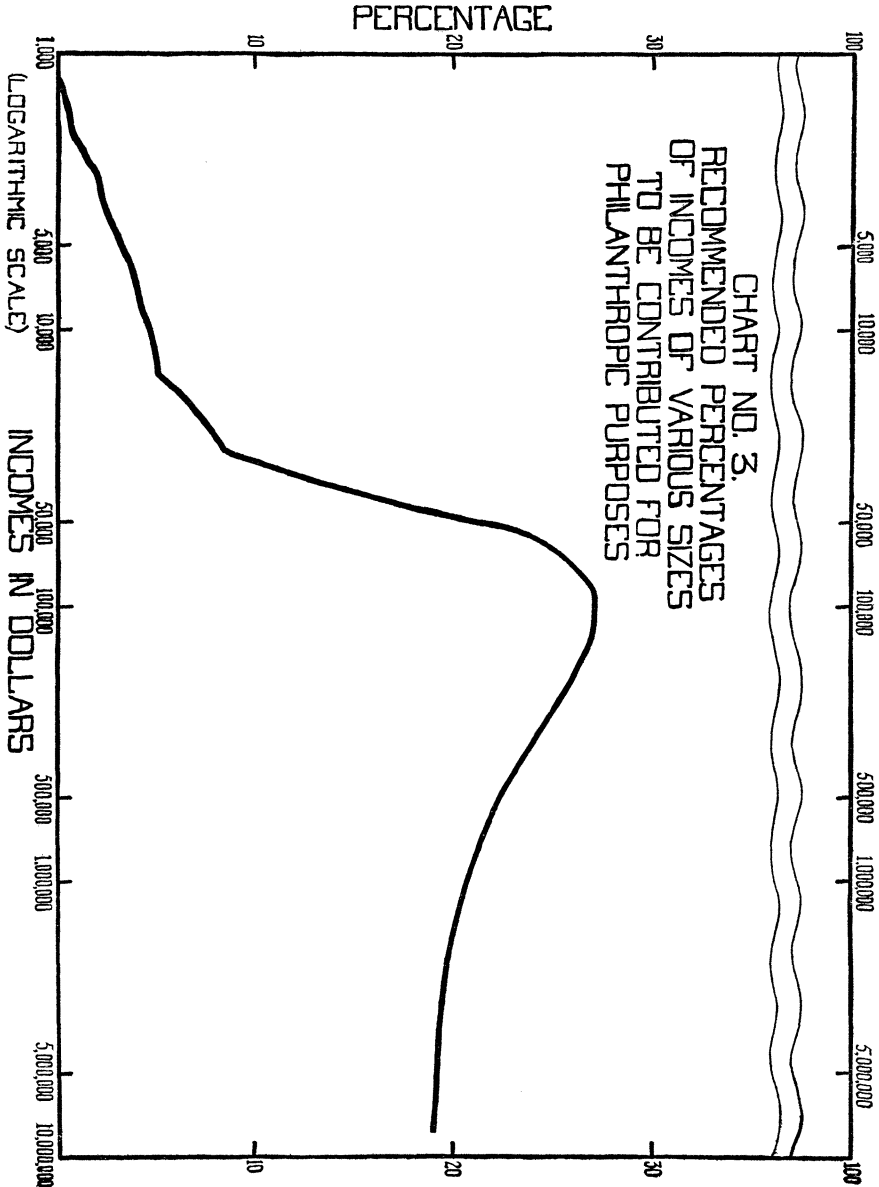
TABLE 10.—RECOMMENDED SCALE OF DONATIONS AND INVESTMENTS
FOR INDICATED INCOMES.

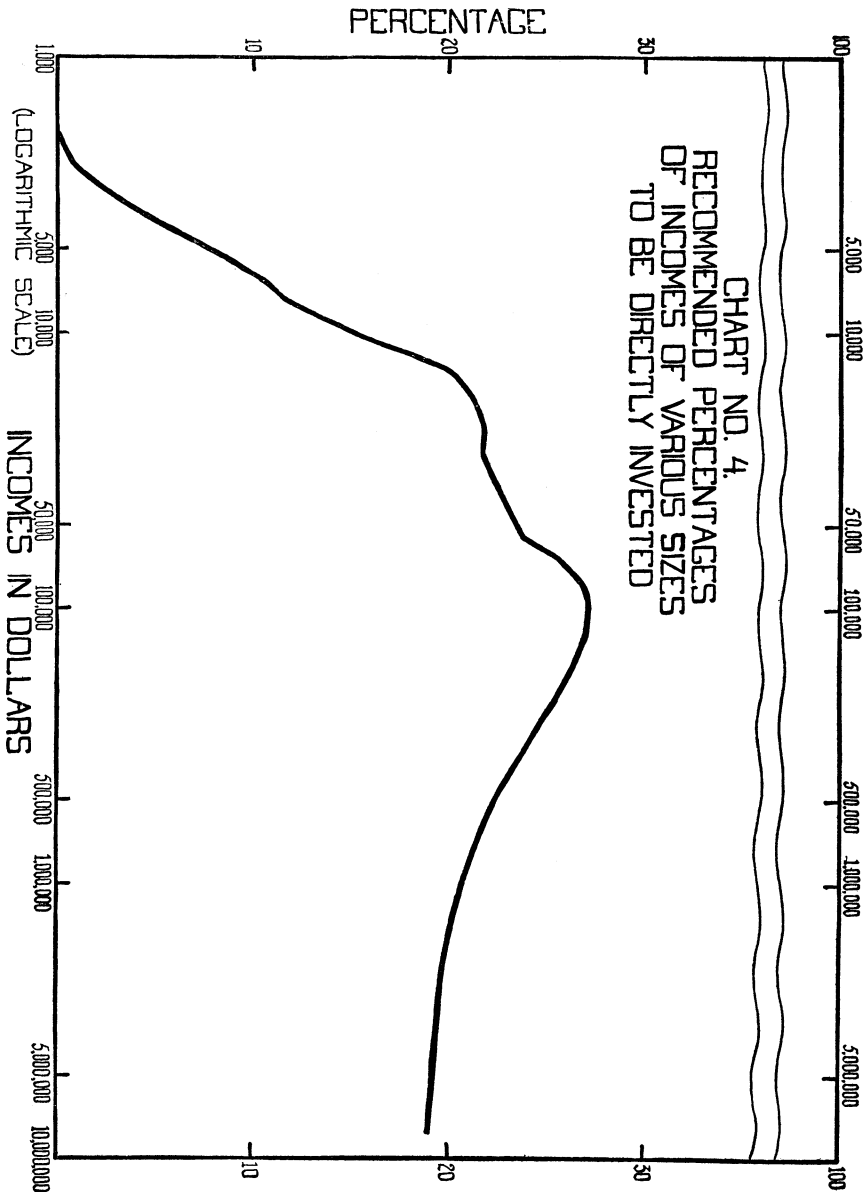
Family Income	Percentage to Be Given to Charity	Percentage to Be Used for Investment	Family Income	Percentage to Be Given to Charity	Percentage to Be Used for Investment
\$1,250	.10	.	\$7,500	4.1	11.6
1,350	.3	.	8,500	4.3	12.9
1,450	.4	.	9,500	4.6	14.5
1,550	.5	.02	10,500	4.8	16.0
1,650	.6	.07	11,500	4.9	17.4
1,750	.7	.12	12,500	5.0	18.7
1,850	.7	.16	13,500	5.1	19.7
1,950	.8	.2	14,500	5.1	20.5
2,050	.9	.3	17,500	6.4	21.3
2,150	1.1	.4	22,500	7.7	21.9
2,250	1.3	.6	27,500	8.5	21.8
2,350	1.4	.7	35,000	12.6	22.4
2,450	1.5	.9	45,000	19.0	23.2
2,550	1.7	1.1	55,000	23.8	23.8
2,650	1.9	1.4	65,000	25.5	25.5
2,750	2.0	1.7	75,000	26.4	26.4
2,850	2.1	2.0	85,000	26.9	26.9
2,950	2.1	2.3	95,000	27.2	27.2
3,050	2.2	2.6	125,000	27.0	27.0
3,150	2.2	2.9	172,000	26.2	26.2
3,250	2.3	3.2	222,000	25.3	25.3
3,350	2.3	3.5	273,000	24.5	24.5
3,450	2.4	3.7	344,000	23.7	23.7
3,550	2.4	4.0	411,000	23.0	23.0
3,650	2.5	4.3	525,000	22.2	22.2
3,750	2.6	4.6	777,000	21.2	21.2
3,850	2.6	4.9	1,200,000	20.4	20.4
3,950	2.7	5.2	1,720,000	19.9	19.9
4,500	3.0	6.7	2,410,000	19.6	19.6
5,500	3.6	8.9	3,340,000	19.4	19.4
6,500	3.9	10.6	8,100,000	19.0	19.0

investments rise steadily until a maximum of 27.2 per cent is reached for each purpose at \$95,000, and that after this both decline. This decline, however, is caused not by any increase in the amount devoted to personal expenditure—that proportion indeed steadily decreases—but to the rapidly increasing percentage of federal income taxation. It will also be observed that gifts begin at from \$1,250 to \$1,550, at which point a very slight allowance for investment appears. Although the rate for both is constantly increasing, that for investment increases at a faster ratio, until by the time \$2,900 has been reached the two are approximately equal. From \$2,950 to \$14,500 the rate of giving rises from 2.1 per cent of the total income to 5.1 per cent, while that of investments increases to 20.5. From \$14,500 to \$55,000 on the other hand, the rate of giving increases faster than that of investment, rising from 5.1 per cent to 23.8, while investments increase only from 20.5 per cent to 23.8. From \$55,000 on, the proportions to be devoted to each of these purposes are equal. All of this is in accordance with our

belief that in the smaller incomes of the middle class, based as they are largely upon personal services, the ratio of investments to donations should be greater than among the wealthy where the income is largely derived from property, not service, and where the outlook for the future is so much more assured.

Perhaps a clearer view of our recommended ratio can be gained from Charts 3 and 4, which show in graphic form the suggested proportions





for gifts and for investments respectively in families of the standard size. Like Chart 2 they use the logarithmic scale on the horizontal axis in order to compress into one chart the enormous range of incomes from \$1,200 to \$8,100,000.

All the preceding rates have been computed on the basis of the standard family. They do not in themselves inform anyone with a dif-

ferent set of dependents how much he should give or invest. To make such comparisons possible it is necessary to reduce these figures to a common basis, to indicate what the rates should be for each amount of income per equivalent adult male. This has been done in Table 11.

TABLE 11.—RECOMMENDED PERCENTAGES TO BE DONATED AND INVESTED FOR INCOMES PER EQUIVALENT ADULT MALE.

Income per Equivalent Adult Male	Percentage to Be Given to Charity	Percentage to Be Used for Investment	Income per Equivalent Adult Male	Percentage to Be Given to Charity	Percentage to Be Used for Investment
\$375	.10	.	\$2,250	4.1	11.6
405	.3	.	2,550	4.3	12.9
435	.4	.	2,850	4.6	14.5
465	.5	.02	3,150	4.8	16.0
495	.6	.07	3,450	4.9	17.4
525	.7	.12	3,750	5.0	18.7
555	.7	.16	4,050	5.1	19.7
585	.8	.20	4,350	5.1	20.5
615	.9	.3	5,250	6.4	21.3
645	1.1	.4	6,750	7.7	21.9
675	1.3	.6	8,250	8.5	21.8
705	1.4	.7	10,500	12.6	22.4
735	1.5	.9	13,500	19.0	23.2
765	1.7	1.1	16,500	23.8	23.8
795	1.9	1.4	19,500	25.5	25.5
825	2.0	1.7	22,500	26.4	26.4
855	2.1	2.0	25,500	26.9	26.9
885	2.1	2.3	28,500	27.2	27.2
915	2.2	2.6	37,500	27.0	27.0
945	2.2	2.9	51,600	26.2	26.2
975	2.3	3.2	66,600	25.3	25.3
1,005	2.3	3.5	81,900	24.5	24.5
1,035	2.4	3.7	103,200	23.7	23.7
1,065	2.4	4.0	123,300	23.0	23.0
1,095	2.5	4.3	157,500	22.2	22.2
1,125	2.6	4.6	233,100	21.2	21.2
1,155	2.6	4.9	360,000	20.4	20.4
1,185	2.7	5.2	516,000	19.9	19.9
1,350	3.0	6.7	723,000	19.6	19.6
1,650	3.6	8.9	1,002,000	19.4	19.4
1,950	3.9	10.6	2,430,000	19.0	19.0

This table should of course be used in conjunction with Table 9. The inquirer should first determine by consulting Table 9 how many equivalent adult males are dependent upon him for support. He should then divide his total net income⁵ by that number to find his income per equivalent adult male. By then consulting Table 11 he can see what percentage of his income he should give away and what percentage he should invest. This may be illustrated by a few examples. An independent single man receiving a net income of \$2,535 finds that his own support is equivalent to 1.3 adult males and hence his income

⁵ *I.e.*, Income after losses and state and local taxes have been deducted.

is \$1,900 per equivalent adult male (*i.e.*, $2535 \div 1.3$). As Table 11 shows, this carries with it a recommended percentage for donations of 3.9, which should be applied to his *entire* income of \$2,535, making a total of \$99. On the other hand let us assume that a family of father, mother, and four children aged 16, 12, 10, and 5 respectively, have a total family income of \$2,535. The number of equivalent adult males in this family is therefore 4.6 (*i.e.*, $1.0 + .9 + .9 + .8 + .6 + .4$), and the income per equivalent adult male is \$551. An inspection of Table 11 shows that incomes of \$555 per equivalent adult male carry a recommended percentage of .7 per cent. This percentage can be used as approximately accurate, and would mean, when applied to the total net family income, a total charitable contribution of \$17.75.

Still a third illustration may be of service. A family of five composed of father, mother, non-employed sister and two children aged 7 and 2 respectively, receives \$4,000 from the father's salary, \$1,000 from securities owned, and \$500 for caring for the sister. The total annual family income therefore is \$5,500 and the number of equivalent adult males dependent upon this amount for support is 3.63 (*i.e.*, $1.0 + .9 + .9 + .6 + .23$). The income per equivalent adult male is therefore roughly \$1,520. An inspection of Table 11 reveals that this falls slightly over one-half the distance between \$1,350 and \$1,650, carrying percentages for charity of 3.0 per cent and 3.6 per cent respectively. It is approximately accurate therefore to take 3.3 per cent as the proportion to be contributed, making a total to be contributed of \$181.50.

In a similar fashion one may ascertain the percentages which families of varying sizes should invest.

3. *The Probable Amount That Will Be Raised by the Scales of Giving and Saving.*

Will these scales for giving and investing raise sufficient funds? This can be tested by applying them to the probable amount of income received in 1921 by each income group. The material upon which these latter estimates are based is the able study of our national income for the years 1909-1919 made by the National Bureau of Economic Research. The full details will be found in the note to this chapter, but it is sufficient to state that we estimate the total national income for 1921 at the March price level to be approximately 56.7 billions, of which approximately 1.2 billions consisted of corporate surplus, leaving 55.5 billions of personal income. The probable distribution of this amount among the various income classes was also computed by following the figures of the National Bureau of Economic Research still further, and the approximate average income for each group was computed. By multiplying the probable total amount of income in each group by the

recommended percentages for charity and adding the products, we can secure the approximate grand total which such a scale would raise. This is shown in detail in Table 12. This table is divided into two sections. Section A includes individual incomes below \$2,800 annually, and is divided into the three groups of independent single men, independent single women, and families. Section B covers incomes over \$2,800 annually where it has been found impossible so to subdivide the group and where accordingly all incomes are treated as family incomes.

The basis upon which this classification was made is explained in the note to this chapter. In tables 12 and 13 the percentages for charity are (for purely technical convenience) carried out to the hundredth of a per cent instead of to a tenth as in Tables 10 and 11.

It will be seen from Table 12 that our scale will probable raise approximately 1731 millions for philanthropic purposes. This is about 12 millions, a fraction of a per cent, in excess of our estimated minimum needs of 1719 millions. In view of the inevitable lack of precision of much of our data we may therefore regard this as an adequate correspondence.

In a somewhat similar fashion we can determine whether the suggested scale of investments, in conjunction with other sources of saving, will raise sufficient capital. The most important of these other sources of saving are:

1. Corporate surplus. As has been mentioned, we estimate the probable net corporate surplus for 1921 at 1.2 billions, practically all of which could be used for purposes of reinvestment.

2. Savings through insurance. The sums to be devoted to insurance have been included in the amounts reserved for personal expenditure and not included in the amounts of direct investment. By using the proportions which the various standard budgets prescribe for this purpose for the lower sized incomes, we can ascertain the probable amounts that should thus be saved.⁶ These we place at approximately 1.8⁷ billions.

3. Ostensible payments for rent which in reality constitute part payment for the capital value of dwellings. This may amount to several hundred millions of dollars annually.

It will be seen that the total sum raised from the three foregoing sources will be approximately 3.0 billions plus the somewhat indeterminate amount contained in ostensible rentals. The additional amount

⁶ It should be understood that we are following the statements of the various budgets as to what people "*should*" save for insurance, and not what they do save. In practice men are likely to spend for other purposes much of what they ought to devote to insurance.

⁷ The process of determining this total will be found in the notes to this chapter.

TABLE 12.—ESTIMATED AMOUNTS THAT WOULD BE RAISED FOR PHILANTHROPIC PURPOSES BY THE ADOPTION OF THE RECOMMENDED SCALE OF GIVING.

SECTION A: INCOMES UNDER \$2500.00.

Income Group	Average Income	Single Men			Single Women			Heads of Families		
		Estimated total income in millions rec'd by group	Per cent for charity	Estimated total amount in millions that would be given to charity	Estimated total income in millions rec'd by group	Per cent for charity	Estimated total amount in millions that would be given to charity	Estimated total income in millions rec'd by group	Per cent for charity	Estimated total amount in millions that would be given to charity
\$ 0- 400		119.3			119.3		.11	79.1		
400- 500	450	228.9			108.2	.10	1.15	156.0		
500- 600	550	451.8	.28	1.27	213.6	.54	3.20	229.3		
600- 700	650	674.3	.61	4.11	445.0	.72	5.70	226.4		
700- 800	750	960.2	.76	7.30	633.7	.90	6.87	515.2		
800- 900	850	1447.3	1.11	16.07	490.6	1.40	10.94	601.4		
900-1,000	950	1689.6	1.50	25.34	572.8	1.91	7.07	1112.9		
1,000-1,100	1,050	1638.4	1.91	31.29	340.0	2.08	7.73	1128.9		
1,100-1,200	1,150	1661.9	2.11	35.07	344.9	2.37	2.87	2090.9	.10	2.09
1,200-1,300	1,250	818.2	2.24	18.33	121.2	2.57	2.93	1964.5	.28	5.50
1,300-1,400	1,350	768.7	2.37	18.22	113.9	2.65	2.02	1957.2	.43	8.32
1,400-1,500	1,450	508.4	2.51	12.76	67.3	2.89	1.94	1726.5	.54	9.15
1,500-1,600	1,550	448.4	2.65	11.88	19.5	3.02	.59	1500.0	.67	8.65
1,600-1,700	1,650	428.5	2.82	12.08	16.8	3.20	.54	1290.6	.72	7.45
1,700-1,800	1,750	368.7	2.95	10.88	14.4	3.38	.49	1034.9	.76	6.77
1,800-1,900	1,850	388.1	3.14	12.19	12.4	3.57	.44	891.1	.90	7.36
1,900-2,000	1,950	334.1	3.32	11.09	10.8	3.66	.40	818.3	1.11	8.05
2,000-2,100	2,050	247.6	3.44	8.52	9.5	3.75	.36	725.5	1.26	8.67
2,100-2,200	2,150	219.6	3.63	7.97	8.5	3.84	.33	687.8	1.40	8.69
2,200-2,300	2,250	152.9	3.69	5.64	7.6	3.92	.30	620.4	1.50	8.64
2,300-2,400	2,350	137.9	3.78	5.21	6.9	3.95	.27	575.9	1.68	10.50
2,400-2,500	2,450	110.0	3.84	4.22	6.3	4.00	.25	625.2	1.91	9.26
2,500-2,600	2,550	101.2	3.92	3.97	5.8	4.04	.23	484.8	2.01	9.00
2,600-2,700	2,650	86.6	3.95	3.42	5.3	4.09	.22	447.6		
2,700-2,800	2,750	79.9	4.00	3.20						
	Total			270.03	Total		56.95	Total		127.52

TABLE 12—Continued—SECTION B: INCOMES OVER \$2800.00

Income Group	Average Income	Estimated Total Income in Millions Rec'd by Group	Per Cent Taken for Charity	Estimated Total Amount That Would Be Given to Charity
\$2,800-2,900	\$2,850	\$488.40	2.08	\$10.16
2,900-3,000	2,950	438.45	2.11	9.25
3,000-3,100	3,050	416.25	2.18	9.07
3,100-3,200	3,150	388.50	2.24	8.70
3,200-3,300	3,250	360.75	2.28	8.23
3,300-3,400	3,350	333.00	2.30	7.66
3,400-3,500	3,450	310.80	2.37	7.37
3,500-3,600	3,550	294.15	2.44	7.18
3,600-3,700	3,650	277.50	2.51	6.97
3,700-3,800	3,750	260.85	2.57	6.70
3,800-3,900	3,850	244.20	2.62	6.40
3,900-4,000	3,950	233.10	2.65	6.18
4,000-5,000	4,500	1831.50	3.02	55.31
5,000-6,000	5,500	1226.55	3.63	44.52
6,000-7,000	6,500	888.00	3.92	34.81
7,000-8,000	7,500	677.10	4.07	26.56
8,000-9,000	8,500	538.35	4.31	23.20
9,000-10,000	9,500	438.45	4.58	20.08
10,000-11,000	10,500	366.30	4.78	17.51
11,000-12,000	11,500	310.80	4.92	15.29
12,000-13,000	12,500	266.40	4.97	13.24
13,000-14,000	13,500	233.10	5.06	11.79
14,000-15,000	14,500	205.35	5.13	10.53
15,000-20,000	17,500	771.45	6.37	49.14
20,000-25,000	22,500	532.80	7.68	40.92
25,000-30,000	27,500	399.60	8.50	33.97
30,000-40,000	35,000	566.10	12.60	71.33
40,000-50,000	45,000	377.40	18.98	71.63
50,000-60,000	55,000	271.95	23.84	64.83
60,000-70,000	65,000	210.90	25.47	53.72
70,000-80,000	75,000	166.50	26.42	43.99
80,000-90,000	85,000	138.75	26.93	37.37
90,000-100,000	95,000	116.55	27.15	31.64
100,000-150,000	125,000	405.15	26.97	109.27
150,000-200,000	172,000	238.65	26.17	62.45
200,000-250,000	222,000	166.50	25.32	42.16
250,000-300,000	273,000	122.10	24.53	29.95
300,000-400,000	344,000	166.50	23.72	39.49
400,000-500,000	411,000	99.90	23.03	23.01
500,000-750,000	525,000	133.20	22.23	29.61
750,000-1,000,000	777,000	77.70	21.18	16.46
1,000,000-1,500,000	1,200,000	88.80	20.41	18.12
1,500,000-2,000,000	1,720,000	49.95	19.90	9.94
2,000,000-3,000,000	2,410,000	55.50	19.56	10.86
3,000,000-4,000,000	3,340,000	27.75	19.35	5.37
4,000,000 and over	8,100,000	77.70	18.97	14.74
Grand Total		\$55,500.00		\$1731.18

that will probably be raised by our recommended scale of direct investment is shown in Table 13. This table necessarily uses the same data as Table 12 for the total income in each group, the average income and the classification of income recipients as between independent

TABLE 13.—ESTIMATED AMOUNTS THAT WOULD BE INVESTED BY ADOPTION OF THE RECOMMENDED SCALE OF DIRECT SAVING.
SECTION A: INCOMES UNDER \$2800.00.

Income Group	Average Income	Single Men			Single Women			Heads of Families		
		Estimated total income rec'd by group	Per cent for investments	Estimated total amount in millions for investments	Estimated total income rec'd by group	Per cent for investments	Estimated total amount in millions for investments	Estimated total income rec'd by group	Per cent for investments	Estimated total amount in millions for investments
0- 400		119.3	.	.	119.3			79.1		
400- 500	450	228.9	.	.	108.2			156.0		
500- 600	550	451.8	.	.	213.6	.02	.04	229.3		
600- 700	650	674.3	.07	.47	445.0	.12	.53	226.4		
700- 800	750	960.2	.20	1.92	633.7	.28	1.77	515.2		
800- 900	850	1,447.3	.41	5.93	490.6	.72	3.53	601.4		
900-1,000	950	1,689.6	.88	14.87	572.8	1.44	8.25	1,112.9		
1,000-1,100	1,050	1,638.4	1.44	23.59	340.0	1.99	6.77	1,128.9		
1,100-1,200	1,150	1,661.9	2.29	38.06	344.9	2.86	9.86	2,090.9		
1,200-1,300	1,250	818.2	2.86	23.40	121.2	3.70	4.48	1,964.5		
1,300-1,400	1,350	768.7	3.70	28.44	113.9	4.57	5.21	1,957.2		
1,400-1,500	1,450	508.4	4.28	21.76	76.3	5.15	3.93	1,726.5	.02	.35
1,500-1,600	1,550	448.4	5.15	23.09	67.3	6.16	4.15	1,500.0	.07	1.05
1,600-1,700	1,650	428.5	5.87	25.15	19.5	6.74	1.31	1,290.6	.12	1.55
1,700-1,800	1,750	368.7	6.45	23.78	16.8	7.39	1.24	1,034.9	.16	1.66
1,800-1,900	1,850	388.1	7.17	27.83	14.4	8.04	1.16	891.1	.20	1.78
1,900-2,000	1,950	334.1	7.82	26.13	12.4	8.69	1.08	818.3	.28	2.29
2,000-2,100	2,050	247.6	8.25	20.43	10.8	9.07	.98	725.5	.41	2.97
2,100-2,200	2,150	219.6	8.90	19.54	9.5	9.57	.91	620.4	.57	3.91
2,200-2,300	2,250	152.9	9.24	14.13	8.5	10.08	.86	575.9	.72	4.47
2,300-2,400	2,350	137.9	9.74	13.43	7.6	10.58	.80	625.2	.88	5.07
2,400-2,500	2,450	110.2	10.08	11.09	6.9	11.07	.74	484.8	1.12	7.00
2,500-2,600	2,550	101.2	10.58	10.71	6.3	11.36	.66	447.6	1.44	6.98
2,600-2,700	2,650	86.6	10.78	9.34	5.8	11.70	.62		1.71	7.65
2,700-2,800	2,750	79.9	11.07	8.84	5.3					
		Total		391.93	Total		59.58	Total		46.73

TABLE 13—Continued—SECTION B: INCOMES OVER \$2800.00

Income Group	Average Income	Estimated Total Income in Millions Received by Group	Per Cent Taken for Investments	Estimated Total Amt. in Millions That Would Be Used for Investments
\$2,800-2,900	\$2,850	488.40	1.99	9.72
2,900-3,000	2,950	438.45	2.29	10.04
3,000-3,100	3,050	416.25	2.56	10.66
3,100-3,200	3,150	388.50	2.86	11.11
3,200-3,300	3,250	360.75	3.16	11.40
3,300-3,400	3,350	333.00	3.46	11.52
3,400-3,500	3,450	310.80	3.70	11.50
3,500-3,600	3,550	294.15	3.97	11.68
3,600-3,700	3,650	277.50	4.28	11.88
3,700-3,800	3,750	260.85	4.57	11.92
3,800-3,900	3,850	244.20	4.86	11.87
3,900-4,000	3,950	233.10	5.15	12.00
4,000-5,000	4,500	1831.50	6.74	123.44
5,000-6,000	5,500	1226.55	8.90	109.16
6,000-7,000	6,500	888.00	10.58	93.95
7,000-8,000	7,500	677.10	11.56	78.27
8,000-9,000	8,500	538.35	12.92	69.55
9,000-10,000	9,500	438.45	14.49	63.53
10,000-11,000	10,500	366.30	16.02	58.68
11,000-12,000	11,500	310.80	17.44	54.20
12,000-13,000	12,500	266.40	18.70	49.82
13,000-14,000	13,500	233.10	19.66	45.83
14,000-15,000	14,500	205.35	20.50	42.10
15,000-20,000	17,500	771.45	21.32	164.47
20,000-25,000	22,500	532.80	21.89	116.63
25,000-30,000	27,500	399.60	21.84	87.27
30,000-40,000	35,000	566.10	22.40	126.81
40,000-50,000	45,000	377.40	23.20	87.56
50,000-60,000	55,000	271.95	23.84	64.83
60,000-70,000	65,000	210.90	25.47	53.72
70,000-80,000	75,000	165.50	26.42	43.99
80,000-90,000	85,000	138.75	26.93	37.37
90,000-100,000	95,000	116.55	27.15	31.64
100,000-150,000	125,000	405.15	26.97	109.27
150,000-200,000	172,000	238.65	26.17	62.45
200,000-250,000	222,000	166.50	25.32	42.16
250,000-300,000	273,000	122.10	24.53	29.95
300,000-400,000	344,000	166.50	23.72	39.49
400,000-500,000	411,000	99.90	23.03	23.01
500,000-750,000	525,000	133.20	22.23	29.61
750,000-1,000,000	777,000	77.70	21.18	16.46
1,000,000-1,500,000	1,200,000	88.80	20.41	18.12
1,500,000-2,000,000	1,720,000	49.95	19.90	9.94
2,000,000-3,000,000	2,410,000	55.50	19.56	10.86
3,000,000-4,000,000	3,340,000	27.75	19.35	5.37
4,000,000 and over	8,100,000	77.70	18.97	14.74
Grand Total		\$55,500.00		\$2647.79

single men, independent single women, and heads of families. It differs from Table 12 only in that it applies to these figures the recommended percentages for investments instead of the percentages for philanthropy.

This table shows an estimated probable total of 2,648 millions or approximately 2.65 billions. That sum added to the amounts which should be raised from other sources would make a total of approximately 5.65 billions plus the unknown but considerable amounts concealed in rentals. It is probable therefore that our scale of investing could either raise the 6.2 billions we have set as the amount of fresh capital needed to be raised through the price system, or would fall short of so doing by only a slight margin.

Another question of general interest may be answered by a closer study of Tables 12 and 13, namely, What share of the national burden of charities and investments are the various income classes, viewed in large groups, made to bear here, as compared to the share of the national income which they receive? In tabular form the material would look as follows:

Income Class in Terms of Equivalent Family Income ^s	Percentage of National Income Received	Percentage of National Charities Budget to Be Contributed	Percentage of National Direct Savings to Be Invested
Under \$1200	..... 8	..... 0	.....
“ 1500	..... 20	.....	..... 0
\$1200-2000	..... 28	..... 4.5	.....
1500-2000	..... 16	.....	..... .3
2000-2800	..... 20	..... 10.	..... 5.
2800-5000	..... 22	..... 15.5	..... 20.
5000-15,000	..... 12	..... 17.	..... 29.
15,000-60,000	..... 5	..... 19.	..... 24.
Over 60,000	..... 5	..... 34.	..... 22.

Thus the upper 5 per cent of the nation's income is expected to furnish more in gifts than the lower 78 per cent.

4. *Some Larger Aspects of the Problem.*

An oft-heard complaint of the man with small income may now be answered. “Why,” he is wont to ask, “do the promoters of good causes always come to me? They can see that I am poor. Let them go to the wealthy instead. There are enough rich people in this country to

^s Assuming that the families are standard sized families and transposing the income of single men and women to the basis of a standard family. (i.e., an annual income of a single man of \$750 being multiplied by $\frac{3.83}{1.3}$ to equate it in terms of family income.)

supply every worthy cause ten times over if they only wanted to. They can afford it and I can't. Besides, my contributions are so small that they would never be missed."

Now our scale shows just the opposite of this. The very wealthy on it are already dunned very heavily, far more so in view of all existing customs of living than the poor. But even if they exceeded their rate, even if they reduced their personal expenditure to \$20,000 a year flat, regardless of whether their income were \$50,000 or \$8,000,000,000,—that would only add 20 millions to our national charities. How then can the small gifts of the lower income classes be dispensed with? If we were to omit all contributions from families with equivalent incomes of less than \$2,800 a year, our budget would lose approximately \$180,000,000.

Moreover if we did thus exempt all under \$2,800, what percentage of our membership of charitable contributors would we lose? Nearly ninety. Would this be democratic? Would it make for broadly rooted social control?

At the opposite end of the scale the rich man may continue to object that everything is expected of his small group. "Why should 5 per cent of the nation's income be asked to furnish over a third of its benevolences? The federal tax already takes a large share of what we have. You do not ask the man of \$10,000 a year to live like the man of \$1,000. Why then, if I have \$500,000, do you ask me to live practically like the man who has \$50,000? It is absurd. You speak of the psychological effect of giving and saving this and that upon the poor man. How about me? Do I not have established habits of life and ambition? Is life on a dead level suddenly going to become natural for me simply because you wish it to?"

The answer is that our scale is indeed somewhat of a counsel of perfection if one is going to take all our present standards as "normal." But the fact plain to our view is that the luxury side of our standards is not and need not be normal. And since it runs so obviously from the top of the social scale down, where is it to begin to be checked if not at the top? It is not merely that the few large gifts of the rich are intrinsically as necessary as the many small ones of the poor, but that they alone can indirectly stimulate the great sluggish mass of givers between the two extremes. The social climbers of all ranks, especially of the great middle group of incomes, will be more quickly affected to sane living and reasonable generosity by the concrete example of their financial superiors than by any amount of preaching.

As for the man of middle rank, his complaint by this time ought to be faint indeed. Not only is his standard of living influenced less than either of his neighbors', the poor and the rich, but his natural wish for

investment is given all reasonable rein. It is from him accordingly that any fresh increases of the total scale should first of all be drawn. These would normally occur under three conditions:

1. *In times of great national stress.* The war just passed, according to reliable estimates, saw an American charities expenditure for the single year 1918 of four billion dollars. The total we are asking for is less than half of that, seventeen hundred million. It would be unfair in the lowest groups, and manifestly impossible in the upper ones, to double the rates we are proposing.

2. *In small towns and rural regions* where the standard of living is lower and the men of wealth not so numerous. One great difficulty with our scale is that it is national in scope—drawn, that is, to meet a national, not a local need, while the standards of living on which it is based are avowedly urban—not to say metropolitan. As was pointed out in Chapter IV, these standards are to be taken as maximums, and the resultant donations should be treated as minimums. Consequently in rural regions the gifts per equivalent income right down to the bottom of the scale should in all fairness be larger. Not only so, but for local charities the actual burden assumed must be heavier. There will be fewer men of wealth to share it (since these are congregated in the large cities), and once more it is the middle class who ought predominantly to make up the deficit.

3. *To make up for those who fail to give.* Our scale is drawn on the impossible supposition that every man does his duty. It is drawn that way purposely, so that any individual may see what is his theoretically fair share. But it surely requires no argument to show that to be practically successful it cannot be used as a maximum. The man who gives and wishes to give adequately must make up for the many who would think any such apportionment absurd. In all propriety it would once more be the man of medium wealth whose present habits of expenditure have least been called into question, who should bear the brunt of the change.

Finally, our scale is designed to bear more heavily than spontaneous giving would provide, upon the single man without dependents.

So far as we can tell, our total charities budget is not more than 30 to 40 per cent in excess of what the country is giving already. It calls for seventeen odd hundred millions, while we estimate the country today to be giving about twelve to thirteen hundred millions. Of this excess, we are allowing by far the greater part to fall upon two classes of people: (1) the very wealthy (this point has been dealt with already); (2) single men of all ranks. Our scale calls for an exemption of incomes on a per capita (per equivalent adult male) basis. This is not the way most men contribute nowadays. The single man of a given in-

come commonly gives less, not more, than the burdened father of a family. We ask him to contribute nearly three times as much. It is not the number of individuals who may be approached for charitable objects that form the basis of our calculation, but the number of mouths to be fed.

In conclusion, it may well be asked, What features of our suggestion do we consider important and what ones secondary? In general, we hold to our method but do not insist on the details of its application. Before the question, *What Can a Man Afford?* can be answered satisfactorily, we think it is necessary:

1. To take into account our total national income and its distribution on the one hand, and the actual charitable needs of the country on the other.

2. In so doing, to make allowance for necessary investments.

3. To distribute the burden so as

- (a) to exempt those living below the minimum of subsistence;

- (b) to assess those above it at an increasing rate;

- (c) to let the rate fall especially heavily upon the very wealthy⁹

4. To assess any given family in accordance with its membership, on a basis of "equivalent adult males."

Generalizing our recommendations and reducing them to a single sentence, what we propose is *a progressive scale, based on existing knowledge of the total need to be met and of the total amount and distribution of the income that is to meet it; that scale to be applied to individual families on the basis of the membership of the family group.*

⁹ It should be remembered that due to the slowness of Congress in revising the revenue laws we were forced to use the income tax rates of 1920. The 1921 revenue act decreased these rates, particularly on the upper incomes. This will increase the amounts available for both charities and investment.

NOTE TO CHAPTER V

In order not to weary the ordinary reader, the preceding chapter gave only the most general facts concerning our data and methods. In detail our procedure was as follows:

1. *The Assignment of the Maximum Proportions Which Should Be Spent for All Other Purposes (Federal Income Taxes, Charities and Investments) Combined.*

Our first step was to separate the "all other" allowance from the "personal," and our method was of course to set a rate not for total incomes but for successive *increments* of income after the fashion of the income surtax.

TABLE 14.—PROPORTIONS WHICH SHOULD BE TAKEN FROM SUCCESSIVE INCREMENTS OF INCOME FOR ALL PURPOSES OTHER THAN PERSONAL EXPENDITURE.

Increments of Income per Standard Family		Percentage Taken for All Purposes (Taxes, Charities and In- vestments)	Percentage Left for Personal Expenditure (including Insur- ance)
—0-	\$1200.	0.0	100
\$1200-	2000.	2.5	97.5
2000-	2500.	8.5	91.5
2500-	3000.	17.5	82.5
3000-	3500.	20.0	80.0
3500-	4000.	24.0	76.0
4000-	5000.	28.0	72.0
5000-	6000.	30.0	70.0
6000-	8000.	32.5	67.5
8000-	10,000.	45.0	55.0
10,000-	30,000	50.0	50.0
30,000-	40,000	75.0	25.0
40,000-	100,000	96.0	4.0
100,000-	1,000,000	99.0	1.0
Over \$1,000,000		99.5	0.5

The working of this scale may be illustrated by taking a standard sized family with an annual income of \$20,000, and tracing through the amounts taken for "all other purposes" from the various component parts of the income.

Increment of Income	Amount of Increment	Rate for All Other Purposes	Amount for All Other Purposes in \$	Rate for Personal Expenditure (including Insurance)	Amount Left for Personal Expenditure in \$
\$0-\$1200	\$1200	0%	0	100.0	1200.
1200- 2000	800	2.5	20.	97.5	780.
2000- 2500	500	8.5	42.50	91.5	457.50
2500- 3000	500	17.5	87.50	82.5	412.50
3000- 3500	500	20.0	100.	80.0	400.
3500- 4000	500	24.0	120.	76.0	380.
4000- 5000	1000	28.0	280.	72.0	720.
5000- 6000	1000	30.0	300.	70.0	700.
6000- 8000	2000	32.5	650.	67.5	1350.
8000-10000	2000	45.0	900.	55.0	1100.
10000-20000	10,000	50.0	5000.	50.0	5000.
Grand Total	\$20,000	37.5	\$7,500.	62.5	\$12,500.

TABLE 15.—ABSOLUTE AND RELATIVE AMOUNTS THAT INCOMES OF VARYING SIZES
WOULD RETAIN FOR PERSONAL USE AND WOULD DEVOTE TO ALL OTHER
PURPOSES (I.E., FEDERAL INCOME TAXES, CHARITY AND
INVESTMENTS) COMBINED.

Income	Per cent to Be Devoted to		Amount to Be Devoted to	
	Personal expenditure	All other purposes (Federal taxes, charity and investments)	Personal expenditure	All others purposes (Federal taxes, charity and investments)
\$1,250	99.9	.1	\$1,249	\$1
1,350	99.7	.3	1,346	4
1,450	99.6	.4	1,444	6
1,550	99.4	.6	1,541	9
1,650	99.3	.7	1,639	11
1,750	99.2	.8	1,736	14
1,850	99.1	.9	1,834	16
1,950	99.0	1.0	1,931	19
2,050	98.8	1.2	2,026	24
2,150	98.5	1.5	2,117	33
2,250	98.2	1.8	2,209	41
2,350	97.9	2.1	2,300	50
2,450	97.6	2.4	2,390	60
2,550	97.3	2.8	2,480	70
2,650	96.7	3.3	2,569	90
2,750	96.1	3.9	2,640	110
2,850	95.7	4.3	2,730	120
2,950	95.2	4.8	2,810	140
3,050	94.8	5.2	2,890	160
3,150	94.3	5.7	2,970	180
3,250	93.9	6.1	3,050	200
3,350	93.4	6.6	3,130	220
3,450	93.0	7.0	3,210	240
3,550	92.6	7.4	3,290	260
3,650	92.2	7.8	3,360	290
3,750	91.7	8.3	3,440	310
3,850	91.3	8.7	3,520	330
3,950	90.9	9.1	3,590	360
4,500	88.7	11.3	3,990	510
5,500	85.5	14.5	4,700	800
6,500	82.9	17.1	5,390	1,110
7,500	80.8	19.2	6,060	1,440
8,500	78.5	21.5	6,680	1,820
9,500	76.1	23.9	7,230	2,280
10,500	73.8	26.2	7,750	2,750
11,500	71.7	28.3	8,250	3,250
12,500	70.0	30.0	8,750	3,750
13,500	68.5	31.5	9,250	4,250
14,500	67.2	32.8	9,750	4,750
17,500	64.3	35.7	11,250	6,250
22,500	61.1	38.9	13,750	8,750
27,500	59.1	40.9	16,250	11,250
35,000	53.6	46.4	18,750	16,250
45,000	44.9	55.1	20,200	24,800
55,000	37.5	62.5	20,600	34,400
65,000	32.3	67.7	21,000	44,000
75,000	28.5	71.5	21,400	53,600
85,000	25.6	74.4	21,800	63,200
95,000	23.4	76.6	22,200	72,800
125,000	18.1	81.9	22,650	102,350
172,000	13.4	86.6	23,120	148,880

TABLE 15—Continued

Income	Per cent to Be Devoted to		Amount to Be Devoted to	
	Personal expenditure	All other purposes (Federal taxes, charity and investments)	Personal expenditure	All other purposes (Federal taxes, charity and investments)
\$222,000	10.6	89.4	\$23,620	\$198,380
273,000	8.8	91.2	24,130	248,870
344,000	7.2	92.8	24,840	319,160
411,000	6.2	93.8	25,510	385,490
525,000	5.1	94.9	26,650	498,350
777,000	3.8	96.2	29,170	747,830
1,200,000	2.7	97.3	32,400	1,167,600
1,720,000	2.0	98.0	35,000	1,685,000
2,410,000	1.6	98.4	38,450	2,371,550
3,340,000	1.3	98.7	43,100	3,296,900
8,100,000	.8	99.2	66,900	8,033,100

This family it will be seen would be expected to devote \$7,500 of their income for "other purposes" and might retain \$12,500 for personal expenditure. Table 15 shows the same thing—that is, the percentage and amounts in round numbers for "all other" purposes, and the percentage and amounts to be retained for personal expenditure—for families of varying incomes. Chart 2 in Chapter V gives the same material in graphic form.

2. *Allocation of the Amount to Be Expended for All Other Purposes between Federal Income Taxes, Philanthropy and Investments.*

Once we had assigned the relative amount for each of the various incomes which should be devoted to all other purposes, we proceeded to distribute this among the three factors which comprise it: namely (a) federal income taxes, (b) philanthropy, and (c) investments. Our first step was to deduct the amount of the federal income tax, according to the 1920 income tax rates from the "all other" total at each income level. The 1920 tax rates were used because the 1921 Revenue Act had not been passed by Congress when this essay was written. Since we are dealing with the standard sized family, \$2,600 was taken as the amount of family exemption allowed (\$2,000 plus \$600 for the three children).

The amount of the tax so deducted left a composite residue for charities and investment. This we proceeded to apportion in accordance with the general principles described in Chapter V. It should be clearly understood that the percentages on our scale refer only to the composite *residual* amount left for charities and investments, not to the total income.

The general fluctuations in the proportions designed respectively for charity and for investments have been described in Chapter V and it is not necessary to duplicate them here, since an inspection of Table 15 itself will indicate them quite clearly. It is well, however, to point out a further refinement that was introduced because of the method of the federal income tax. The latter exempts all amounts contributed for philanthropic purposes up to 15 per cent of the total net income. The amounts of the exemptions upon the allotted charitable gifts were accordingly deducted from the tax totals and distributed between charities and investment according to the

same ratio as was used in arriving at the original amounts. The additional sums thus distributed to charity necessitated in most instances a still further deduction from the tax total, and its consequent further reallocation. By these means we computed the minimum amounts and percentages which we believed standard families of different incomes should give and invest.

TABLE 16.—PROPORTIONATE DIVISION OF COMPOSITE RESIDUAL SUMS FOR CHARITY AND INVESTMENT BETWEEN THESE TWO PURPOSES.

Income	Percentage for Charity	Percentage for Investment	Income	Percentage for Charity	Percentage for Investment
			\$7,500	26	\$74
\$1,250	100		8,500	25	75
1,350	100		9,500	24	76
1,450	100		10,500	23	77
1,550	95	5	11,500	22	78
1,650	90	10	12,500	21	79
1,750	85	15	13,500	20.5	79.5
1,850	82	18	14,500	20	80
1,950	79	21	17,500	23	77
2,050	76	24	22,500	26	74
2,150	73	27	27,500	28	72
2,250	69	31	35,000	36	64
2,350	66	34	45,000	45	55
2,450	63	37	55,000	50	50
2,550	60	40	65,000	50	50
2,650	57	43	75,000	50	50
2,750	54	46	85,000	50	50
2,850	51	49	95,000	50	50
2,950	48	52	125,000	50	50
3,050	46	54	172,000	50	50
3,150	44	56	222,000	50	50
3,250	42	58	273,000	50	50
3,350	40	60	344,000	50	50
3,450	39	61	411,000	50	50
3,550	38	62	525,000	50	50
3,650	37	63	777,000	50	50
3,750	36	64	1,200,000	50	50
3,850	35	65	1,720,000	50	50
3,950	34	66	2,410,000	50	50
4,500	31	69	3,340,000	50	50
5,500	29	71	8,100,000	50	50
6,500	27	73			

These percentages were given in Table 10 in Chapter V and need not be repeated here.

3. Determination of the Probable National Income for 1921.

We turn now to the other branch of our task. Will the recommended percentages raise sufficient funds? To do this it becomes necessary to show: (1) the probable total national income in 1921, (2) its probable distribution among the various income classes. Once having determined as best we can the probable facts in each of these fields, we can secure the probable amount that will be raised for charities and investments by the use of our recommended scale, by applying our respective percentages to the estimated amounts of income in each income class.

This section will deal with the probable total income in 1921 and the next section will consider its probable distribution. Fortunately our task is ma-

terially lightened by the very painstaking investigation of our national income for the years 1909-1919 which has been made by the National Bureau of Economic Research under the direction of Dr. Wesley C. Mitchell. This study as has been stated¹ gives estimates of the total amount of the national income by years, computed in terms of the 1913 price level. It will further be remembered that the national income decreased from 39.6 billions in 1917 to 37.3 billions in 1919 or a drop of 2.3 billions.

These figures furnish a basis for estimating the probable national income for 1921. It seems probable that on the whole our national income decreased as much in the two years from 1919 to 1921 as it did in the two years 1917 to 1919. This was due both to the severe business depression and to the general lowering of industrial morale. The most accurate estimate that could be made for the national income of 1921 in terms of the prices of 1913 therefore would probably be 35.0 billions. This, however, must be translated into 1921 prices to give an accurate picture of the present national money income. Probably the best single index that can be used is the wholesale price index of the United States Bureau of Labor Statistics. In computing the amount of capital needed, we have used the prices prevailing in the month of March, 1921; and it is only proper therefore that we should continue to use that month in measuring the 1921 income. The wholesale price index for March, 1921, was 62 per cent above the 1913 average. Using this as the index of price changes, we should have a national income for 1921, in terms of March, 1921, dollars, of 56.7 billions (*i. e.*, 35.0 billions \times 1.62).

Some of this amount, however, is composed of corporate surplus. In order to secure the amounts received by individuals, this should be subtracted from the above total. A rough measure of the probable amount of this corporate surplus can be secured by studying the magnitude of such surpluses in the past. Here again the researches of Dr. Mitchell and his associates are invaluable. They have computed the probable amount of corporate surplus for the ten years from 1910 to 1919 inclusive, and make the following estimates as to its amount.

Year	Total Estimated Corporate Sur- plus in Bil- lions
1910	\$1.4
1911	1.1
1912	1.1
1913	1.2
1914	.6
1915	1.9
1916	4.5
1917	4.0
1918	1.9
1919	1.5

The average annual corporate surplus for the ten year period was therefore 1.9 billions. This, however, includes the extraordinary surpluses of 1916 and 1917 which are undoubtedly not typical. It seems fairer therefore to take the six year period of 1910 to 1915 inclusive as more representative, and the average for these years was 1.2 billions. Such an estimate

¹ In the note to Chapter III.

as to the amount of corporate surplus in 1921 is probably the most nearly correct approximation that can be made. Deducting the 1.2 billions of estimated corporate surplus from the 56.7 billions of estimated national income, we have a remainder of 55.6 billions of income received by individuals.

4. Probable Distribution of the National Income Among the Income Classes.

What is the probable distribution of this total among the various income classes? The best as well as the most recent estimate is that made in the study of the National Bureau of Economic Research by Mr. F. R. Macaulay. From income tax data and other sources, he has worked out estimates for 1918 showing the probable total amount received by the seventy or more income groups into which he classified the population, together with the percentages which each of these amounts formed of the total national income.

Table 17 shows the estimated distribution of personal income in the

TABLE 17.—PERCENTAGE ANALYSIS OF THE PROBABLE DISTRIBUTION OF PERSONAL INCOMES IN THE UNITED STATES IN 1918.

(SOURCE: MITCHELL, and others: *Income in the United States*, TABLE 26.)

Income Class (in \$)	Percentage of Total Amount of Income Received	Cumulative Percentage of Total In- come under Class above	Income Class (in \$)	Percentage of Total Amount of Income Received	Cumulative Percentage of Total In- come under Class above
Under Zero	— .22	— .22	3,700-3,800	.47	77.08
Zero to 100	.01	— .21	3,800-3,900	.44	77.52
100-200	.03	— .18	3,900-4,000	.42	77.94
200-300	.09	— .09	4,000-5,000	3.30	81.24
300-400	.30	.21	5,000-6,000	2.21	83.45
400-500	.75	.96	6,000-7,000	1.60	85.05
500-600	1.48	2.44	7,000-8,000	1.22	86.27
600-700	2.43	4.87	8,000-9,000	.97	87.24
700-800	3.46	8.33	9,000-10,000	.79	88.03
800-900	4.42	12.75	10,000-11,000	.66	88.69
900-1,000	5.16	17.91	11,000-12,000	.56	89.25
1,000-1,100	5.57	23.48	12,000-13,000	.48	89.73
1,100-1,200	5.65	29.13	13,000-14,000	.42	90.15
1,200-1,300	5.46	34.59	14,000-15,000	.37	90.52
1,300-1,400	5.13	39.72	15,000-20,000	1.39	91.91
1,400-1,500	4.58	44.30	20,000-25,000	.96	92.87
1,500-1,600	4.04	48.34	25,000-30,000	.72	93.59
1,600-1,700	3.51	51.85	30,000-40,000	1.02	94.61
1,700-1,800	3.02	54.87	40,000-50,000	.68	95.29
1,800-1,900	2.59	57.46	50,000-60,000	.49	95.78
1,900-2,000	2.23	59.69	60,000-70,000	.38	96.16
2,000-2,100	1.94	61.63	70,000-80,000	.30	96.46
2,100-2,200	1.72	63.35	80,000-90,000	.25	96.71
2,200-2,300	1.53	64.88	90,000-100,000	.21	96.92
2,300-2,400	1.38	66.26	100,000-150,000	.73	97.65
2,400-2,500	1.25	67.51	150,000-200,000	.43	98.08
2,500-2,600	1.14	68.65	200,000-250,000	.30	98.38
2,600-2,700	1.04	69.69	250,000-300,000	.22	98.60
2,700-2,800	.96	70.65	300,000-400,000	.30	98.90
2,800-2,900	.88	71.53	400,000-500,000	.18	99.08
2,900-3,000	.79	72.32	500,000-750,000	.24	99.32
3,000-3,100	.75	73.07	750,000-1,000,000	.14	99.46
3,100-3,200	.70	73.77	1,000,000-1,500,000	.16	99.62
3,200-3,300	.65	74.42	1,500,000-2,000,000	.09	99.71
3,300-3,400	.60	75.02	2,000,000-3,000,000	.10	99.81
3,400-3,500	.56	75.58	3,000,000-4,000,000	.05	99.86
3,500-3,600	.53	76.11	4,000,000 and over	.14	100.00
3,600-3,700	.50	76.61			

United States in terms of the percentage of the total amount received by each income class. As in the case of all other material derived from the studies of the National Bureau of Economic Research, it is published through the courtesy of the Bureau.

While it is possible that the relative distribution of incomes has changed since 1918, it is probable that no substantial inaccuracy would occur if we applied these percentages to the estimated total income for 1921, thus giving us the probable total amounts received by each income class. By computation also the approximate average incomes in each class can be secured.

But here another difficulty occurs. Who form these income classes? Mr. Macaulay's study refers only to incomes received by individuals. Some of these are single men or women without direct family responsibilities, while others are heads of families. As we have pointed out, the amounts and proportions which such individuals, even if receiving the same income, should give, varies in proportion to their relative responsibilities. Consequently we must determine the approximate number of independent single men, independent single women, and heads of families in each income group. Dr. W. I. King in his "Wealth and Income of the People of the United States" divided incomes received in 1910 below \$1,400 a year into the three classes mentioned above, and gave the approximate number of each of these classes in the various groups below.² Dr. King's estimate of the percentage that each of these classes formed of the number in each income group is given in Table 18. It is only reasonable to assume that these percentages also indicate the proportion of the total income in that group which was received by the respective classes.

TABLE 18.—ESTIMATED PERCENTAGE COMPOSITION IN 1910 OF INCOME CLASSES BELOW \$1,400 AS BETWEEN INDEPENDENT SINGLE MEN, INDEPENDENT SINGLE WOMEN, AND HEADS OF FAMILIES. (Computed from King, *Wealth and Income of the People of the U. S.*, p. 224.)

Income	Percentage Composed of		
	Single Men	Single Women	Men, or Widows with Families
\$ 0- 200	50	50	0
200- 300	55	26	19
300- 400	50	33	17
400- 500	59	20	21
500- 600	53	11	36
600- 700	27	4	69
700- 800	20	3	77
800- 900	22	1	77
900-1000	27	1	72
1000-1100	23	1	76
1100-1200	18	1	81
1200-1300	16	1	83
1300-1400	15	1	84

Dr. King found it impossible to make any such separation for incomes above \$1,400, but pointed out that among the higher income classes, the single men and women are relatively much less numerous than in the very low income groups.³

² King, *Wealth and Income of the People of the United States*, p. 224.

³ King, *op. cit.*, p. 223.

These estimates by King for 1910 are of great assistance to us in determining the probable situation in 1921. Perhaps the chief difficulty in applying them unaltered is the general increase in wages in the intervening decade. This general upward movement makes it impossible to use the same percentages for the same class intervals. On the whole, the least inaccurate approximation seems to be to double the length of each class interval and to assume that the same proportions apply within it as before. Thus, if 50 per cent of the income in the 0-\$200 group was received by single men in 1910, then we would assume that in 1921 50 per cent of the income below \$400 was also received by single men. If in 1910, 55 per cent of the income between \$200 and \$300 was secured by single men, then we should assume that in 1921 a similar percentage would be secured by single men in the group varying from \$400 to \$600, and so on.

Thus the incomes up to \$2,800 a year (*i.e.*, twice \$1,400) would be apportioned among the three groups of (a) independent single men, (b) independent single women, and (c) heads of families with dependents. The probable total amount received in each income group by these classes is shown in section A of both Tables 12 and 13.

It is not possible to carry out this division for incomes above \$2,800. It is probable, however, that the inaccuracy will not be great if we regard all those above this point as falling in the third category, since the number of independent single men and women is undoubtedly small.

It is probably also correct to assume that the average family in each of these groups is of approximately the standard size, since, when the probable number of independent single men and women receiving incomes have been deducted from the total population, the remaining receivers of income would have on the average nearly five people dependent upon them.

By the methods described, the probable amounts in each income group were estimated and the basic data furnished for Tables 13 and 14.

5. Additional Sources of Capital Investment.

It has been pointed out in Chapter V that, in addition to the fresh capital raised by the recommended scale of direct investments, there are other sources of saving as well of which the most important are: (a) net corporate surplus, (b) capital payments on dwellings included in ostensible rentals, (c) savings for insurance (which we have included under personal expenditure).

The probable amount of corporate surplus is, as we have stated, 1.2 billions. The capital payments on dwellings included in rentals arise from the fact that there are tens of thousands and possibly hundreds of thousands of families who are buying houses on the installment plan and who are paying periodical sums which include not merely the rental but also a payment upon the principal. It is of course impossible to estimate, with any degree of accuracy, the approximate total investments from this source. It would not be surprising if it amounted in the aggregate to several hundred million dollars.

It is possible to estimate fairly accurately what the total amount of insurance would be if those with incomes of less than \$10,000 laid aside the sums listed as proper in the authoritative budgetary studies.

The standard budget of the Philadelphia Bureau of Municipal Research,

as revised to December, 1920, prices, set 3.2 per cent as the proper amount of personal expenditure which a family upon the level described should lay aside for insurance. The Washington "minimum of health and decency" budget provided for a 5 per cent investment in insurance which was also treated as a part of the necessary personal expenditures of the family. In view of the scanty protection against death or disability which such allowances for insurance would give, it seems adequate to apply the first percentage of 3.2 to incomes ranging between \$1,400 and \$2,000 and to apply the 5 per cent allowance to incomes from \$2,000 to \$10,000.

Above \$10,000 it is only reasonable to assume that the annual direct savings will be approximately sufficient to protect the families concerned without additional sums for insurance. This becomes increasingly true as the incomes increase, due to the comparatively greater importance of property income with its relative continuity of return irrespective of the life of the possessor.

The laying aside of these percentages for insurance would raise approximately the following sums:

Equivalent Family Income ⁴	Total Income in Group (in millions of \$)	Percentage to Be Devoted to Insurance	Amounts That Would Be Devoted to Insurance (in millions of \$)
\$1400- \$2000	11,100	3.2	353
\$2000-\$10,000	29,150	5.0	1,458

The probable total that would thus be raised through insurance would therefore be about 1810 millions, or approximately 1.8 billions. This added to the corporate surplus of 1.2 billions and the probable direct savings through our recommended scale, would total 5.7 billions, plus the unknown amounts of investment concealed in the rentals.

If it should be objected that we are over-optimistic and that 1.2 billions of corporate surplus is too high an estimate for the slack business year 1921, then it should be remembered that the total of 6.2 billions, as we have pointed out in Chapter III, is also too large a sum to be invested in a year of such depression. We are of course trying to approximate the average needs over a period of years, and estimates of both the 1.2 billions of corporate surplus and the 6.2 billions of the needed capital investments hold true when judged by this standard.

⁴ By equivalent family income is meant income in terms of the standard family of five members composed of 3.33 equivalent adult males. An independent single man with an income of \$650 has an income equivalent to a standard family income of approximately \$1665 (*i.e.*, $\$650 \times \frac{3.33}{1.3}$).

A SELECTED BIBLIOGRAPHY

The following books are suggested as stimulative of thought upon the general ethical problem of how one should spend his money. The footnotes to the various chapters can also be used if anyone wishes to study in more detail specific phases of the problem.

JOHN WOOLMAN.—A WORD OF REMEMBRANCE AND CAUTION TO THE RICH. A fine spiritual statement of the ethical duty of living the simple life. Printed as an appendix to Whittier's edition of *John Woolman's Journal*, pp. 290-315, and also separately by the Friends' Book Store of Philadelphia and the Fabian Society of England.

E. J. URWICK.—LUXURY AND WASTE OF LIFE.—The best modern discussion of the problem of luxury and the limits of proper expenditure.

WILLIAM SMART.—THE DEMOCRATISATION OF CONSUMPTION IN HIS STUDIES IN ECONOMICS. Succinct statement of problem.

GORE, HOBHOUSE, RASHDALL AND OTHERS.—PROPERTY, ITS DUTIES AND RIGHTS (Macmillan). Probably the most illuminating discussion of the evolution of the concept of property and its proper use and place in the modern commonwealth.

H. R. CALKINS.—A MAN AND HIS MONEY. Emphasis upon the Christian doctrine of stewardship as opposed to the legal theory of exclusive possession.

JOHN A. RYAN.—DISTRIBUTIVE JUSTICE (Macmillan). The ethics of distribution ably discussed from the standpoint of Catholic doctrine and ethics.

HENRY S. COFFIN.—A MORE CHRISTIAN INDUSTRIAL ORDER (Macmillan). A discussion of the proper Christian attitude in matters of production, consumption, investment, and industrial relations, by one of the ablest Protestant ministers of the day.

NATIONAL BUREAU OF ECONOMIC RESEARCH (W. C. Mitchell, W. I. King and others).—INCOME IN THE UNITED STATES. ITS AMOUNT AND DISTRIBUTION 1909-1919 (Harcourt, Brace & Howe). A painstaking statistical study of just what the national income is and how it is distributed.

LILLIAN BRANDT.—HOW MUCH SHALL I GIVE? (The Frontier Press). An historical review of the various doctrines of giving which have been advanced. Written for the same competition as this essay and therefore in some ways similar to it.